



Alaska  
Fisheries Science  
Center

National Marine  
Fisheries Service

U.S DEPARTMENT OF COMMERCE

## AFSC PROCESSED REPORT 2014-05

Species Identification Confidence in the  
Bering Sea Slope Surveys (1976-2010)

July 2014

This report does not constitute a publication and is for information only.  
All data herein are to be considered provisional.

This document should be cited as follows:

Orr, J. W., D. T. Drumm, G. R. Hoff, and D. E. Stevenson. 2014. Species identification confidence in the Bering Sea Slope surveys (1976-2010). AFSC Processed Rep. 2014-05, 71 p. Alaska Fish. Sci. Cent., NOAA, Natl. Mar. Fish. Serv., 7600 Sand Point Way NE, Seattle WA 98115.

Available at [www.afsc.noaa.gov/Publications/ProcRpt/PR2014-05.pdf](http://www.afsc.noaa.gov/Publications/ProcRpt/PR2014-05.pdf)

Reference in this document to trade names does not imply endorsement by the National Marine Fisheries Service, NOAA.

SPECIES IDENTIFICATION CONFIDENCE IN THE BERING SEA SLOPE SURVEYS  
(1976–2010)

by

James W. Orr, David T. Drumm, Gerald R. Hoff, and Duane E. Stevenson

Resource Assessment and Conservation Engineering Division  
Alaska Fisheries Science Center  
National Marine Fisheries Service  
National Oceanic and Atmospheric Administration  
7600 Sand Point Way NE  
Seattle, WA 98115-6349

July 2014



## ABSTRACT

The Resource Assessment and Conservation Engineering (RACE) Division of the Alaska Fisheries Science Center (AFSC) has been conducting standardized bottom trawl surveys of the upper continental slope of the eastern Bering Sea (EBS) since 1976. The quality and specificity of field identifications for many taxa have fluctuated over the history of the surveys due to changing priorities and resources. Historical trends in identification quality for the EBS slope survey have not been documented. This report includes an identification confidence matrix for all fishes and invertebrates identified from the EBS slope triennial and biennial surveys from 1976 through 2010. The matrix lists a confidence level, with frequency of occurrence and numbers of vouchered lots, for each taxon for each survey year and is intended to serve as a general guideline for data users interested in assessing the relative reliability of historical species identifications on these surveys.



## CONTENTS

Abstract .....	iii
Contents .....	v
Introduction.....	1
Materials and Methods.....	2
Results and Discussion .....	3
Acknowledgments.....	7
Citations .....	9
Tables .....	11



## INTRODUCTION

The Resource Assessment and Conservation Engineering (RACE) Division of the Alaska Fisheries Science Center (AFSC) has been conducting periodic bottom trawl surveys of the upper continental slope of the eastern Bering Sea (EBS) since 1976. Following a pilot survey conducted in 2000 to test the suitability of two versions of the Poly Nor' eastern bottom trawl gear for the slope bottom, a stratified random design following standard trawl protocols has been used to sample trawlable areas of depths from 200 to 1,200 m (Stauffer 2004, Hoff and Britt 2011). In previous years, gears, methods, vessels, and towing stations also were not standardized and therefore those catch data are not comparable with the more recent times series of 2002-2010 (Hoff and Britt 2011). The number of tows conducted also varied substantially over the years, with totals ranging from 50 (in 1976) to over 300 (1982 and 1985) prior to 2002, stabilizing at about 200 with the institution of standardized methodologies in 2002.

Data gathered from the summer surveys are stored in an AFSC Oracle™ database (RACEbase) and are used for fisheries-independent assessments of population trends that inform stock assessments used to develop management strategies for commercially exploited fish and invertebrate species in the region. In addition to their utility as a management tool, data collected on these surveys have been used by a variety of constituents to examine spatial and temporal trends in the fish and invertebrate fauna of the Alaska region.

Throughout the history of the surveys, changing priorities and limited resources have led to fluctuations in the quality and specificity of field identifications for taxa that are not of direct commercial importance. For some taxa, species identification quality is limited by the state of taxonomic knowledge, which for some groups has changed considerably over the course of the time series. For others, identification characteristics that can be reliably used in the field are not known or have only recently become widely recognized. Another factor influencing the quality and specificity of field identifications is the suite of identification tools available to survey participants, which has evolved dramatically over the course of the survey time series and continues to improve with increasing knowledge of the region's fauna. In addition to changes in field identification tools, the training level and experience of scientists participating in the surveys have varied widely over the years, which may have had profound and unpredictable influences on the consistency and reliability of field identifications for some taxa.

Although recently documented in the Bering Sea shelf (Stevenson and Hoff 2009), Gulf of Alaska, and Aleutian Islands surveys (Orr et al. 2014), trends in species identification quality and specificity have not been routinely documented during the EBS slope bottom trawl surveys and have generally not been taken into account by data users. However, as an increasing number of users request access to survey data for use in a broad diversity of studies, it is now more important than ever to provide users with a tool to help assess the confidence level that should be assigned to identifications of each taxon throughout the history of the surveys. The tables in this report are intended to further these efforts by providing a rough estimate of identification quality for each taxon in each year of the EBS slope survey from 1976 through 2010. As a taxon-by-taxon list of the reasoning behind the coding for each taxon is well beyond the scope of this report, data users are encouraged to contact the coauthors or another systematic taxonomist of the RACE Division for further clarification on specific taxa or individual records.

## MATERIALS AND METHODS

An identification confidence level was established for each taxon for each survey year for both fishes (Table 1) and invertebrates (Table 2) following Stevenson and Hoff (2009) and Orr et al. (2014). Both are sorted in ascending order by RACE species code. These tables refer only to data collected during the annual surveys of the EBS upper continental slope conducted by the AFSC from 1976 through 2010 during May-August. The confidence level is unavoidably subjective but was influenced by several factors, including relevant taxonomic literature, available field identification tools, interannual identification trends, and examination of collected specimens. The identification confidence level codes used in this table are defined as follows:

- 1 – High confidence. Taxonomy is stable, reliable, and consistent at this level, and field identification characteristics are well known and reliable, or survey records have been verified from vouchers returned to the laboratory or from photos of specimens in the field.
- 2 – Moderate confidence. Taxonomy may be questionable at this level, or field identification characteristics may be variable and difficult to assess consistently.

3 – Low confidence. Taxonomy is incompletely known, or reliable field identification characteristics are unknown, or the occurrence of this taxon in the region is doubtful and survey records have not been verified. Included at this level are problematic species pairs, for which the identification to the pair may not be problematic but the identification to species is.

In addition to the confidence level, frequency of occurrence (the numbers of hauls in which taxa were recorded in the catch) and numbers of vouchered lots (a lot comprises one or more specimens per taxon collected per haul) are reported to give additional context for each record. For example, some records of rare, difficult to identify species may be given a confidence level of “1,” because all records were verified from vouchers in the laboratory.

## RESULTS AND DISCUSSION

Two tables were produced to provide a confidence index, frequency of occurrence, and numbers of vouchered lots for all fish and invertebrate taxa recorded in catch data and reported in RACEbase (Tables 1–2). These are intended to serve as a general guideline to assist data users in assessing the relative historical reliability of the species identification data in this time series and do not necessarily reflect the reliability of an individual record in a specific haul.

Assignment of confidence levels is not strictly an evaluation of identification difficulty but a determination of the confidence in identifications within the survey database. That is, a species recorded in the database may be rare and difficult to identify in the field, but if it was collected and identified in the laboratory, it was given a high level of confidence. On the other hand, some species commonly captured may also be easily confused with a sister species and thus were given a lower confidence level.

Four major changes in the history of these surveys have influenced the quality of identifications: 1) updated taxonomic literature and field guides; 2) the presence of trained systematic taxonomists on staff; 3) annual training of field biologists in identification; and 4) routine collection of voucher specimens. Although focused on animals found in more shallow waters than the deeper waters sampled in the Bering Sea slope survey, the ongoing development of field guides to the fishes and benthic macroinvertebrates of the region has encouraged the

consistent application of identification characteristics and taxonomy among vessels and legs within and among survey years for all surveys. Prior to the mid-1990s, staff members with some academic training and taxonomic interests were encouraged to augment identification guides along with their primary survey duties. Among these, J. Long's unpublished guides to the sculpins and skates of the North Pacific began to increase confidence in the identification of these two groups in the early 1980s. In the slope survey, its influence is particularly notable in records of skates in 1988. In this year, 69% of the skates were identified to species, as compared with prior surveys when only 0 to 22% were identified to species. When not identified to species, all were identified to the family level, an identification level that was not used after 1991 in the slope survey. Later, D. W. Kessler's (1985) "Alaska's saltwater fishes and other sea life," produced first as a laminated deck guide, provided an all-in-one guide to the common taxa encountered in the groundfish surveys and increased the consistency of identifications in the mid- to late 1980s, although it focused on more shallow water communities than those found on the slope, a problem encountered in many of the guides. The pre-publication laminated field guide version of this book was updated every year for fishes and invertebrates beginning in 1995, with the hire of an academically trained systematic ichthyologist, until 1997, when separate invertebrate guides were produced by contractor R. N. Clark. In this year, Clark produced a guide to Aleutian Islands invertebrates and, in 1999, a guide to Gulf of Alaska invertebrates, which included deeper water taxa to account for the deeper coverage of Gulf of Alaska surveys. Finally, in 2006, Clark produced the "Field guide to the benthic marine invertebrates of Alaska's shelf and upper slope, taken by NOAA/NMFS/AFSC/RACE Division trawl surveys," the first guide to cover most of the known invertebrate taxa encountered in trawl surveys conducted at all depths in Alaska. Most recently in 2013, D. Drumm, a post-doctoral invertebrate zoologist, and coauthors completed an exhaustive checklist of all macroinvertebrates recorded in Alaska's marine waters from the Arctic through the Bering Sea and Aleutians to Southeast Alaska (Orr et al. 2013, Drumm et al. in review). With the aid of each of these guides and references, additional taxa began to be recorded that had not been previously identified in catches.

For fishes, the field guide has continued to be updated for use on deck. For slope fishes in particular, it was first updated in 2001. Several publications have synthesized and increased our knowledge of the species of fishes in Alaska's waters. Most important was the publication of the "Fishes of Alaska" by Mecklenburg et al. (2002), a compilation with keys of all fishes recorded

from all depths in Alaska. Additional comprehensive guides to rockfishes (Orr et al. 2000, Kramer and O'Connell 2003), flatfishes (Kramer et al. 2008), and chondrichthyans (Stevenson et al. 2007) have been employed on deck in surveys as they have become available.

Routine annual training in both fish and invertebrate identification began in 1996 and was emphasized for the EBS slope in 2000 and later. During this 4-hour training period, RACE taxonomists familiarized staff members, temporary survey employees, and volunteers with commonly misidentified fishes and gave a review of all invertebrates likely to be encountered. This training has appeared to increase the ability of survey members to identify both fishes and invertebrates.

Recent efforts to help track and stabilize field identifications have included the production of a series of durable field guides for use at sea and a specimen voucher program. Over the past decade, the ongoing development of a series of field guides to the fishes and benthic macroinvertebrates of the region has encouraged the consistent application of identification characteristics and taxonomy among vessels and legs within and among survey years. Incorporated into all standard survey protocols in 1999, the specimen voucher program encourages the collection of rare or unusual specimens of fishes and invertebrates encountered on groundfish surveys as well as specimens of uncertain identity. Specimens collected on the surveys are returned to the AFSC in Seattle, where they are recorded and verified. Fish specimens are then shipped to the University of Washington Fish Collection, where they are curated and permanently stored, while invertebrates are shipped to the California Academy of Sciences, where they are available for examination by various experts and curated for permanent storage. In these collections, specimens are listed online and are made available for examination by experts worldwide, either by way of loans or by personal visits to the collection. Curators or Collection Managers notify RACE taxonomists of re-identifications by experts and these records are updated in RACEbase.

A trend of increasing diversity in the catch data, typically with higher confidence levels, is evident in these data. While some of this increase in diversity is a true taxonomic increase as the result of the recognition and description of new fishes (e.g., Stevenson and Anderson 2005, Stevenson et al. 2007, Baldwin and Orr 2010, Maslenikov et al. 2013) or invertebrates (e.g., Orr et al. 2013, Drumm et al. in review), by far the largest portion is attributable to the identification

of taxa present but not previously identified. No evidence for the effects of environmental or ecosystem changes should be inferred from these confidence-level data alone.

## ACKNOWLEDGMENTS

We thank E. A. Laman and R. R. Lauth for reviewing the manuscript. Additional funding was provided by the North Pacific Research Board, grant number 1016, and the Joint Institute for the Study of the Atmosphere and Ocean (JISAO) under NOAA Cooperative Agreement NA10OAR4320148.



## CITATIONS

- Baldwin, Z. H., and J. W. Orr. 2010. A new species of the snailfish genus *Paraliparis* (Scorpaeniformes: Liparidae) from the eastern Bering Sea. *Copeia* 2010(4):640-643.
- Drumm, D. T., K. P. Maslenikov, R. Van Syoc, J. W. Orr, R. R. Lauth, D. E. Stevenson, and T. W. Pietsch. In review. An annotated checklist of the marine macroinvertebrates of Alaska. U.S. Dep. Commer., *NOAA Prof. Papers*, 911 p.
- Hoff, G. R., and L. L. Britt. 2011. Results of the 2010 eastern Bering Sea upper continental slope survey of groundfish and invertebrate resources. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-224, 300 p.
- Kessler, D. W. 1985. Alaska's saltwater fishes and other sea life. Alaska Northwest Publishing Company, Anchorage, 358 p.
- Kramer, D. E., W. H. Barss, B. C. Paust, and B. E. Bracken. 2008. Guide to Northeast Pacific Flatfishes: Families Bothidae, Cynoglossidae, and Pleuronectidae, 2<sup>nd</sup> ed. Alaska Sea Grant College Program, University of Alaska, Fairbanks, 114 p.
- Kramer, D. E., and V. O'Connell. 2003. Guide to northeast Pacific rockfishes: genera *Sebastodes* and *Sebastolobus*, 4<sup>th</sup> ed. Alaska Sea Grant College Program, University of Alaska Fairbanks, 78 p.
- Maslenikov, K. P., J. W. Orr, and D. E. Stevenson. 2013. Range extensions and significant distributional records for 82 species of fishes in Alaskan marine waters. *Northwest. Nat.* 94(1):1-21.
- Mecklenburg, C. W, T. A. Mecklenburg, and L. K. Thorsteinson. 2002. Fishes of Alaska. Bethesda, MD: American Fisheries Society, 1,037 p.
- Orr, J. W., M. A. Brown, and D. C. Baker. 2000. Guide to rockfishes (Scorpaenidae) of the genera *Sebastodes*, *Sebastolobus*, and *Adelosebastodes* of the northeast Pacific Ocean, 2<sup>nd</sup> ed. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-117, 47 p.
- Orr, J. W., D. T. Drumm, R. J. Van Syoc, K. P. Maslenikov, T. W. Pietsch, D. E. Stevenson, and R. R. Lauth. 2013. An annotated checklist of the marine macroinvertebrates of Alaska, and an evaluation of identification confidence in RACE groundfish surveys. North Pacific Research Board Final Report 1016, 1,090 p.

- Orr, J. W., D. T. Drumm, E. A. Laman, D. E. Stevenson, and G. R. Hoff. 2014. Species identification confidence in the Gulf of Alaska and Aleutian Islands groundfish surveys (1980–2011). AFSC Processed Report 2014-01, 237 p. Alaska Fisheries Science Center, NOAA, National Marine Fisheries Service, 7600 Sand Point Way NE, Seattle WA 98115.
- RACE (Resource Assessment and Conservation Engineering Division). 2012. Species code book. Alaska Fisheries Science Center, NOAA, National Marine Fisheries Service, 7600 Sand Point Way NE, Seattle, WA 98115.
- Stauffer, G. (compiler). 2004. NOAA protocols for groundfish bottom trawl surveys of the nation's fishery resources. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-F/SPO-65, 205 p.
- Stevenson, D. E., J. W. Orr, G. R. Hoff, and J. D. McEachran. 2007. A field guide to sharks, skates, and ratfish of Alaska. Alaska Sea Grant College Program, University of Alaska, Fairbanks. 77 p.
- Stevenson, D. E., and M. E. Anderson. 2005. *Bothrocara nyx*: a new species of eelpout (Perciformes: Zoarcidae) from the Bering Sea. Zootaxa 1094:53-64.
- Stevenson, D. E., and G. R. Hoff. 2009. Species identification confidence in the eastern Bering Sea shelf survey (1982-2008). AFSC Processed Report 2009-04, 46 p. Alaska Fisheries Science Center, NOAA, National Marine Fisheries Service, 7600 Sand Point Way NE, Seattle, WA 98115.

Table 1.-- Identification confidence indexes (1 = high confidence, 2 = moderate confidence, 3 = low confidence), followed in parentheses by frequency of occurrence and numbers of vouchered lots collected, for all taxa of fishes recorded during Bering Sea upper continental slope surveys from 1976 through 2010. Number of tows conducted during each survey year are in parentheses below the survey year. Taxa are sorted by RACE species codes (RACE 2012).

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
1		fish eggs unident.								1 (4/1)	1 (1/1)	1 (6/4)	
2		fish larvae unident.		1 (2/0)									
10	Petromyzontidae	lamprey unident.		1 (1/0)					1 (1/0)				1 (29/0)
21	<i>Lampetra tridentata</i>	Pacific lamprey		1 (1/0)	1 (1/0)	1 (7/0)	1 (16/0)	1 (21/0)	1 (38/0)	1 (63/0)	1 (49/0)	1 (48/0)	1 (23/0)
100	Myxinidae	hagfish unident.				1 (1/0)							
310	<i>Squalus acanthias</i>	spiny dogfish			1 (3/0)	1 (3/0)						1 (1/0)	
320	<i>Somniosus pacificus</i>	Pacific sleeper shark			1 (1/0)	1 (19/0)	1 (10/0)	1 (6/0)	1 (36/0)	1 (16/0)	1 (24/0)	1 (29/0)	1 (19/0)
400	Rajidae	skate unident.	1 (38/0)	1 (85/0)	1 (240/0)	1 (265/0)	1 (29/0)	1 (39/0)					
401		skate egg case unident.		1 (10/0)			1 (1/0)	1 (6/0)	1 (19/1)	1 (58/0)			
402	<i>Bathyraja</i> sp. egg case								1 (2/1)	1 (36/0)	1 (99/25)	1 (2/0)	1 (1/0)
405	<i>Bathyraja</i> sp.								1 (2/0)		1 (5/5)		1 (1/1)
410	<i>Bathyraja abyssicola</i>	deepsea skate		3 (4/0)			3 (2/0)		1 (1/1)		1 (2/1)	1 (3/1)	1 (3/0)
411	<i>Bathyraja abyssicola</i> egg case	deepsea skate egg case										1 (6/3)	

Table 1.-- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
420	<i>Raja binoculata</i>	big skate	2 (6/0)	2 (1/0)									
435	<i>Bathyraja interrupta</i>	Bering skate	1 (3/0)	1 (5/0)			1 (14/0)		1 (36/6)	1 (72/12)	1 (109/6)	1 (97/0)	1 (102/0)
436	<i>Bathyraja interrupta</i> egg case							1 (1/1)		1 (17/16)	1 (38/2)	1 (41/0)	
440	<i>Raja rhina</i>	longnose skate	1 (2/0)	1 (3/0)								1 (1/1)	
445	<i>Raja badia</i>	roughshoulder skate								1 (2/1)			
455	<i>Bathyraja taranetzi</i>	mud skate						1 (23/1)	1 (23/3)	1 (41/2)	1 (42/0)	1 (43/1)	
456	<i>Bathyraja taranetzi</i> egg case	mud skate egg case								1 (1/1)	1 (8/0)	1 (5/5)	
460	<i>Bathyraja trachura</i>	roughtail skate				2 (9/0)		1 (39/7)	1 (47/4)	1 (47/3)	1 (54/1)	1 (36/0)	
461	<i>Bathyraja trachura</i> egg case									1 (5/5)	1 (30/13)	1 (13/8)	
471	<i>Bathyraja parmifera</i>	Alaska skate				1 (15/0)		1 (7/1)	1 (20/2)	1 (32/2)	1 (36/0)	1 (20/0)	
472	<i>Bathyraja aleutica</i>	Aleutian skate			1 (30/0)	1 (14/0)		1 (84/4)	1 (112/2)	1 (173/1)	1 (161/0)	1 (166/0)	
473	<i>Bathyraja aleutica</i> egg case	Aleutian skate egg case								1 (8/8)	1 (25/0)	1 (12/0)	
474	<i>Bathyraja parmifera</i> egg case	Alaska skate egg case								1 (8/8)	1 (35/2)	1 (32/0)	
475	<i>Bathyraja lindbergi</i>	commander skate						1 (46/6)	1 (53/3)	1 (69/0)	1 (71/1)	1 (76/0)	

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
476	<i>Bathyraja lindbergi</i> egg case	Commander skate egg case										1 (3/0)	1 (1/1)
480	<i>Bathyraja maculata</i>	whiteblotched skate					1 (5/0)		1 (24/3)	1 (44/3)	1 (62/1)	1 (63/0)	1 (66/0)
481	<i>Bathyraja maculata</i> egg case	whiteblotched skate egg case										1 (4/2)	1 (1/0)
485	<i>Bathyraja minispinosa</i>	whitebrow skate					1 (1/0)		1 (45/9)	1 (54/3)	1 (99/3)	1 (111/2)	1 (102/0)
486	<i>Bathyraja minispinosa</i> egg case	whitebrow skate egg case									1 (9/8)	1 (10/4)	1 (18/15)
495	<i>Bathyraja violacea</i>	Okhotsk skate					3 (2/0)						
10110	<i>Atheresthes stomias</i>	arrowtooth flounder	2 (50/0)	2 (110/0)	1 (240/0)	1 (288/0)	1 (111/0)	1 (69/0)	1 (56/0)	1 (83/0)	1 (141/0)	1 (124/0)	1 (146/0)
10111	<i>Atheresthes</i> sp.									1 (1/1)			
10112	<i>Atheresthes evermanni</i>	Kamchatka flounder		1 (22/0)					1 (74/0)	1 (80/0)	1 (131/0)	1 (195/0)	1 (171/0)
10115	<i>Reinhardtius hippoglossoides</i>	Greenland turbot	1 (46/0)	1 (159/0)	1 (304/0)	1 (327/0)	1 (119/0)	1 (75/0)	1 (87/0)	1 (109/0)	1 (160/0)	1 (136/0)	1 (144/0)
10120	<i>Hippoglossus stenolepis</i>	Pacific halibut	1 (45/0)	1 (37/0)	1 (107/0)	1 (187/0)	1 (26/0)	1 (25/0)	1 (36/0)	1 (41/0)	1 (59/0)	1 (71/0)	1 (62/0)
10130	<i>Hippoglossoides elassodon</i>	flathead sole	1 (32/0)	1 (72/0)	1 (133/0)	1 (177/0)	1 (66/0)	1 (63/0)	1 (42/0)	1 (71/0)	1 (118/0)	1 (97/0)	1 (112/0)
10180	<i>Microstomus pacificus</i>	Dover sole	1 (7/0)	1 (23/0)	1 (35/0)	1 (29/0)	1 (12/0)	1 (9/0)	1 (4/0)	1 (15/0)	1 (37/1)	1 (30/0)	1 (39/0)
10190	<i>Emballichthys bathybius</i>	deepsea sole		1 (2/0)	1 (30/0)	1 (18/0)	1 (3/0)	1 (1/0)	1 (11/0)	1 (12/0)	1 (22/1)	1 (28/0)	1 (18/0)

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
10200	<i>Glyptocephalus zachirus</i>	rex sole	1 (19/0)	1 (48/0)	1 (165/0)	1 (199/0)	1 (79/0)	1 (51/0)	1 (42/0)	1 (69/0)	1 (123/0)	1 (98/0)	1 (104/0)
10210	<i>Limanda aspera</i>	yellowfin sole		1 (1/0)									
10240	<i>Clidoderma asperrimum</i>	roughscale sole				1 (2/0)							
10260	<i>Lepidopsetta</i> sp.	rock sole unident.	1 (14/0)	1 (4/0)	1 (16/0)	1 (7/0)	1 (4/0)	1 (4/0)					
10261	<i>Lepidopsetta polyxystra</i>	northern rock sole							1 (9/0)	1 (9/0)	1 (13/0)	1 (10/0)	1 (4/0)
10285	<i>Pleuronectes quadrituberculatus</i>	Alaska plaice		1 (1/0)									
20000	Agonidae	poacher unident.	1 (2/0)		1 (2/0)	1 (79/0)							
20002	<i>Percis japonicus</i>	dragon poacher		1 (3/0)	1 (5/0)	1 (2/0)					1 (1/0)		
20004	<i>Leptagonus</i> sp.							1 (1/1)					
20005	<i>Leptagonus leptorhynchus</i>	longnose poacher						1 (1/0)					
20006	<i>Leptagonus frenatus</i>	sawback poacher	1 (10/0)	1 (46/0)	1 (114/0)	1 (75/0)	1 (14/0)	1 (14/0)	1 (18/8)	1 (49/2)	1 (77/0)	1 (46/0)	1 (47/0)
20034	<i>Bathyagonus</i> sp.	starsnout poacher unident.											1 (1/0)
20035	<i>Bathyagonus alascanus</i>	gray starsnout				2 (9/0)				2 (2/1)	2 (3/2)		2 (2/1)
20038	<i>Bathyagonus nigripinnis</i>	blackfin poacher	1 (1/0)	1 (41/0)	1 (51/0)		1 (56/0)	1 (5/0)	1 (61/4)	1 (76/1)	1 (130/0)	1 (92/0)	1 (104/0)

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
20040	<i>Podothecus accipenserinus</i>	sturgeon poacher	1 (4/0)		1 (2/0)	1 (4/0)		1 (2/0)					
20050	<i>Aspidophoroides bartoni</i>	Aleutian alligatorfish		1 (1/0)						1 (1/0)		1 (1/1)	1 (1/0)
20061	<i>Occella dodecaedron</i>	Bering poacher						1 (6/0)					
20100	Alepocephalidae	slickhead unident.									1 (1/1)		
20122	<i>Bajacalifornia megalops</i>										1 (1/1)	1 (1/1)	
20130	<i>Rouleina attrita</i>	softskin slickhead									1 (1/1)		1 (1/1)
20510	<i>Anoplopoma fimbria</i>	sablefish	1 (10/0)	1 (92/0)	1 (281/0)	1 (312/0)	1 (124/0)	1 (51/0)	1 (71/0)	1 (100/0)	1 (129/0)	1 (115/0)	1 (100/0)
20572	<i>Nansenia candida</i>	bluethroat argentine						1 (2/0)	1 (2/0)	1 (1/1)			
20614	Bathylagidae	deepsea smelt unident.		1 (28/0)	1 (23/0)		1 (15/0)			1 (1/1)			
20615	<i>Bathylagus pacificus</i>	Pacific blacksmelt			2 (10/0)			2 (18/0)	2 (29/0)	2 (27/1)	2 (19/0)	2 (49/1)	2 (14/0)
20619	<i>Bathylagus</i> sp.	blacksmelt unident.				1 (2/0)			1 (32/0)	1 (31/0)	1 (46/0)	1 (23/0)	1 (36/0)
20620	<i>Bathylagus milleri</i>	robust blacksmelt							2 (9/0)	2 (9/0)	2 (7/0)	2 (21/1)	2 (8/0)
20622	<i>Leuroglossus schmidti</i>	northern smoothtongue	1 (39/0)	1 (28/0)		1 (32/0)	1 (19/0)	1 (71/0)	1 (86/0)	1 (139/0)	1 (117/0)	1 (122/0)	
20624	<i>Bathylagus ochotensis</i>	popeye blacksmelt						2 (5/3)	2 (3/0)	2 (6/3)	2 (8/3)	2 (6/2)	

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
20660	<i>Leuroglossus</i> sp.									1 (3/0)	1 (2/1)		
20720	<i>Bathymaster signatus</i>	searcher	1 (2/0)	1 (9/0)	1 (34/0)	1 (16/0)	1 (7/0)	1 (2/0)	1 (2/0)	1 (8/2)	1 (13/0)	1 (6/0)	1 (12/4)
21000	Chauliodontinae	viperfish unident.			1 (2/0)			1 (1/0)					
21010	<i>Chauliodus macouni</i>	Pacific viperfish		1 (48/0)	1 (22/0)		1 (14/0)	1 (6/0)	1 (30/0)	1 (28/1)	1 (45/1)	1 (30/0)	1 (31/0)
21110	<i>Clupea pallasi</i>	Pacific herring		1 (2/0)		1 (17/0)	1 (1/0)			1 (1/0)	1 (2/0)	1 (1/0)	1 (6/0)
21200	Macrouridae	grenadier unident.	1 (3/0)										
21210	<i>Coryphaenoides</i> sp.				1 (7/0)	1 (10/0)	1 (11/0)	1 (1/1)				1 (1/1)	
21220	<i>Coryphaenoides acrolepis</i>	Pacific grenadier	1 (3/0)	1 (13/0)		1 (33/0)			1 (33/3)	1 (34/0)	1 (49/1)	1 (39/1)	1 (29/2)
21230	<i>Albatrossia pectoralis</i>	giant grenadier	1 (76/0)	1 (158/0)	1 (173/0)	1 (73/0)	1 (37/0)	1 (94/3)	1 (108/4)	1 (157/5)	1 (141/0)	1 (146/0)	
21232	<i>Coryphaenoides cinereus</i>	popeye grenadier	1 (45/0)	1 (99/0)	1 (94/0)				1 (72/1)	1 (77/1)	1 (108/2)	1 (105/0)	1 (91/0)
21238	<i>Coryphaenoides filifer</i>	filamented grenadier						1 (1/1)			1 (1/1)		
21239	<i>Coryphaenoides longifilis</i>	longfin grenadier	1 (3/0)	1 (9/0)	1 (2/0)				1 (2/2)	1 (4/4)	1 (3/2)		1 (2/1)
21300	Cottidae	sculpin unident.	1 (23/0)	1 (5/0)	1 (7/0)	1 (3/0)	1 (2/0)	1 (3/0)					
21305	<i>Zesticelus profundorum</i>	flabby sculpin		1 (1/0)					1 (5/3)	1 (10/6)	1 (7/4)	1 (10/1)	1 (9/0)

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
21313	<i>Gymnophanthis</i> sp.		2 (1/0)										
21316	<i>Gymnophanthis galeatus</i>	armorhead sculpin		2 (2/0)	2 (8/0)						1 (1/1)		
21339	<i>Malacocottus</i> sp.							1 (50/0)					
21341	<i>Malacocottus zonurus</i>	darkfin sculpin					1 (98/0)		1 (44/5)	1 (78/0)	1 (119/3)	1 (90/0)	1 (113/0)
21342	<i>Hemilepidotus</i> sp.	Irish lord		1 (5/0)									
21347	<i>Hemilepidotus jordani</i>	yellow Irish lord	1 (5/0)	1 (3/0)	1 (21/0)	1 (7/0)	1 (1/0)				1 (5/0)	1 (2/0)	1 (2/0)
21353	<i>Triglops metopias</i>	crescent-tail sculpin		3 (1/0)									
21354	<i>Triglops scepticus</i>	spectacled sculpin	1 (5/0)	1 (9/0)	1 (38/0)	1 (17/0)	1 (3/1)	1 (15/0)	1 (7/3)	1 (15/0)	1 (24/3)	1 (20/0)	1 (15/0)
21355	<i>Triglops pingeli</i>	ribbed sculpin					1 (17/0)	1 (2/0)					
21356	<i>Triglops macellus</i>	roughspine sculpin			3 (1/0)								
21370	<i>Myoxocephalus polyacanthocephalus</i>	great sculpin		1 (5/0)			1 (1/0)	1 (3/0)		1 (1/0)	1 (1/0)	1 (1/0)	1 (3/0)
21371	<i>Myoxocephalus jaok</i>	plain sculpin		1 (1/0)	1 (1/0)			1 (3/0)					
21375	<i>Myoxocephalus</i> sp.		1 (6/0)	1 (1/0)				1 (1/0)					
21390	<i>Dasyctinus setiger</i>	spinyhead sculpin	1 (16/0)	1 (64/0)	1 (97/0)	1 (65/0)	1 (32/0)	1 (28/0)	1 (25/11)	1 (68/0)	1 (116/0)	1 (61/0)	1 (72/0)

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
21395	<i>Psychrolutes phrictus</i>	blob sculpin		1 (11/0)	1 (13/0)	1 (67/0)	1 (1/0)		1 (25/4)	1 (33/1)	1 (34/3)	1 (32/1)	1 (20/0)
21420	<i>Hemitripterus bolini</i>	bigmouth sculpin	1 (12/0)	1 (76/0)	1 (179/0)	1 (166/0)	1 (45/0)	1 (25/0)	1 (30/1)	1 (45/1)	1 (66/0)	1 (70/0)	1 (72/0)
21422	<i>Hemitripterus bolini</i> eggs	bigmouth sculpin eggs								1 (2/0)	1 (3/2)		1 (1/0)
21438	<i>Icelus spiniger</i>	thorny sculpin	1 (4/0)	1 (6/0)	1 (37/0)	1 (31/0)	1 (2/0)	1 (6/0)	1 (4/1)	1 (31/0)	1 (41/2)	1 (18/0)	1 (20/0)
21439	<i>Icelus canaliculatus</i>	blacknose sculpin		2 (23/0)	2 (67/0)	2 (6/0)	2 (18/0)		1 (38/5)	1 (35/0)	1 (45/0)	1 (24/1)	1 (34/0)
21440	<i>Icelus euryops</i>	wide-eye sculpin							1 (6/4)	1 (11/1)	1 (22/2)	1 (10/0)	1 (4/0)
21441	<i>Icelus spatula</i>	spatulate sculpin										2 (2/0)	
21443	<i>Icelus uncinalis</i>	uncinate sculpin		2 (1/0)									
21444	<i>Rastrinus scutiger</i>	roughskin sculpin							1 (2/1)	1 (3/2)			
21446	<i>Icelus</i> sp.			1 (29/0)			1 (3/0)						
21592	<i>Trichodon trichodon</i>	Pacific sandfish	1 (1/0)										
21595	<i>Kali indica</i>	shortnose swallower		3 (1/0)									
21720	<i>Gadus macrocephalus</i>	Pacific cod	1 (36/0)	1 (52/0)	1 (125/0)	1 (159/0)	1 (47/0)	1 (22/0)	1 (12/0)	1 (40/0)	1 (62/0)	1 (44/0)	1 (47/0)
21725	<i>Boreogadus saida</i>	Arctic cod					1 (1/0)						

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
21726	Moridae	codlings unident.		1 (1/0)									
21727	<i>Halargyreus johnsonii</i>	slender codling							1 (2/2)	1 (7/7)	1 (5/2)	1 (5/4)	1 (2/1)
21731	<i>Antimora microlepis</i>	Pacific flatnose		1 (34/0)	1 (58/0)	1 (52/0)	1 (20/0)		1 (24/0)	1 (27/0)	1 (41/0)	1 (46/0)	1 (19/0)
21733	<i>Laemonema longipes</i>	longfin codling			3 (7/0)	3 (1/0)		3 (1/0)					
21740	<i>Theragra chalcogramma</i>	walleye pollock	1 (43/0)	1 (117/0)	1 (187/0)	1 (244/0)	1 (108/0)	1 (69/0)	1 (25/0)	1 (61/0)	1 (117/0)	1 (79/0)	1 (62/0)
21800	Gonostomatidae	bristlemouth unident.					1 (1/0)		1 (1/1)	1 (4/1)		1 (3/1)	1 (2/1)
21805	<i>Sigmops gracilis</i>	slender fangjaw						1 (1/1)	1 (1/1)	1 (11/0)	1 (2/2)		
21810	<i>Cyclothonone</i> sp.			3 (2/0)						1 (2/0)			
21811	<i>Cyclothonone atraria</i>	black bristlemouth							2 (1/1)				
21847	Stomiidae	barbeled dragonfish						1 (1/0)					
21921	<i>Pleurogrammus monopterygius</i>	Atka mackerel	1 (1/0)	1 (2/0)	1 (21/0)			1 (2/0)	1 (2/0)	1 (2/0)	1 (4/0)	1 (5/0)	1 (1/0)
21934	<i>Hexagrammos lagocephalus</i>	rock greenling			1 (1/0)								
22010	<i>Icosteus aenigmaticus</i>	ragfish		1 (8/0)	1 (17/0)	1 (10/0)			1 (1/0)			1 (1/0)	
22170	Cyclopterinae	lumpsucker unident.					1 (1/0)						

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)	
22175	<i>Aptocyclus ventricosus</i>	smooth lump sucker		1 (20/0)	1 (97/0)	1 (18/0)	1 (21/0)	1 (7/0)	1 (39/3)	1 (20/2)	1 (37/0)	1 (57/2)	1 (36/0)	
22200	Liparidae	snailfish unident.		1 (22/0)	1 (2/0)			1 (13/0)	1 (32/0)	1 (3/3)	1 (31/30)	1 (19/17)	1 (5/4)	1 (24/24)
22201	<i>Liparis</i> sp.				1 (7/0)		1 (3/0)							
22204	<i>Liparis dennyi</i>	marbled snailfish					3 (1/0)							
22206	<i>Crystallichthys cyclospilus</i>	blotched snailfish								1 (1/0)	1 (3/1)	1 (1/0)	1 (1/0)	
22214	<i>Elassodiscus</i> sp.									2 (1/1)	2 (2/2)	2 (2/2)	2 (1/1)	
22215	<i>Elassodiscus caudatus</i>	humpback snailfish						1 (40/17)	1 (54/5)	1 (79/16)	1 (57/14)	1 (40/2)		
22216	<i>Elassodiscus tremebundus</i>	blacklip snailfish						1 (23/8)	1 (24/7)	1 (30/7)	1 (35/13)	1 (24/1)		
22217	<i>Allocareproctus jordani</i>	cherry snailfish									1 (2/2)			
22219	<i>Careproctus</i> sp.			1 (69/0)	2 (202/0)	2 (250/0)	2 (38/0)		1 (5/5)	1 (3/3)	1 (6/6)	1 (3/3)	1 (6/6)	
22220	<i>Careproctus melanurus</i>	blacktail snailfish	3 (3/0)	3 (25/0)					1 (36/8)	1 (56/2)	1 (58/1)	1 (42/0)	1 (62/0)	
22222	<i>Careproctus bowersianus</i>	large disk all red snailfish						1 (5/3)			1 (1/1)	1 (2/1)	1 (2/2)	
22223	<i>Careproctus simus</i>	long snouted pink snailfish						1 (6/5)	1 (7/6)	1 (5/5)	1 (9/9)	1 (7/4)		
22224	<i>Careproctus ectenes</i>	shovelhead snailfish								1 (1/1)				

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
22228	<i>Careproctus cypselurus</i>	blackfin snailfish						3 (1/0)	1 (22/13)	1 (42/10)	1 (49/7)	1 (29/12)	1 (21/0)
22229	<i>Careproctus furcellus</i>	emarginate snailfish			1 (28/0)				1 (26/8)	1 (45/9)	1 (75/25)	1 (40/11)	1 (53/0)
22230	<i>Careproctus abbreviatus</i>	short snailfish	3 (1/0)										
22231	<i>Paraliparis ulochir</i>	blackfaced red snailfish							1 (13/13)	1 (7/5)	1 (8/8)	1 (13/10)	1 (1/0)
22233	<i>Careproctus gilberti</i>	smalldisk snailfish	3(3/0)						2 (4/2)	2 (3/3)	2 (8/8)	2 (9/7)	2 (4/4)
22234	<i>Careproctus</i> sp. cf. <i>gilberti</i> (Orr)	Dominator snailfish									2 (5/5)	2 (2/2)	
22235	<i>Careproctus colletti</i>	Alaska snailfish							1 (19/11)	1 (18/2)	1 (37/7)	1 (36/17)	1 (28/0)
22236	<i>Careproctus rastrinus</i>	salmon snailfish	1 (2/0)	1 (4/0)	1 (29/0)	1 (17/0)			1 (2/1)	1 (21/2)	1 (52/10)	1 (24/12)	1 (27/2)
22237	<i>Careproctus ovigerus</i>	abyssal snailfish		3 (1/0)									
22239	<i>Careproctus zachirus</i>	paintbrush snailfish								1 (1/1)			
22240	<i>Careproctus candidus</i>	bigeye snailfish								1 (1/1)			
22241	<i>Paraliparis dactylosus</i>	red snailfish							1 (3/3)	1 (10/7)	1 (15/15)	1 (1/1)	1 (2/2)
22244	<i>Paraliparis cephalus</i>	swellhead snailfish							1 (5/4)	1 (5/4)	1 (2/2)	1 (3/2)	1 (7/1)
22245	<i>Careproctus lycopersicus</i>	tomato snailfish							1 (2/2)	1 (4/4)		1 (2/2)	1 (1/1)

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
22246	<i>Careproctus comus</i>	comic snailfish									1 (1/1)	1 (1/1)	
22249	<i>Paraliparis pectoralis</i>	broadfin snailfish							1 (6/6)	1 (12/12)	1 (12/11)	1 (9/9)	
22250	<i>Paraliparis</i> sp.		2 (33/0)	1 (2/0)					1 (2/2)	1 (6/6)	1 (7/7)	1 (8/8)	1 (6/6)
22251	<i>Careproctus ostentum</i>	microdisk snailfish							1 (2/2)				
22252	<i>Paraliparis paucidens</i>	toothless snailfish							1 (1/1)	1 (1/1)			1 (1/1)
22253	<i>Lipariscus nanus</i>	pygmy snailfish						1 (1/0)	1 (2/2)	1 (4/3)	1 (1/1)		
22255	<i>Nectoliparis pelagicus</i>	tadpole snailfish							1 (1/1)				
22260	<i>Rhinoliparis</i> sp.							1 (2/2)	1 (3/3)	1 (4/4)		1 (5/5)	
22261	<i>Rhinoliparis barbulifer</i>	longnose snailfish							1 (1/1)	3 (2/1)		1 (1/1)	
22262	<i>Rhinoliparis attenuatus</i>	slim snailfish						1 (12/11)	1 (14/12)	1 (9/8)	1 (12/9)	1 (8/5)	
22271	<i>Acantholiparis opercularis</i>	spiny snailfish							1 (1/1)	1 (1/1)			
22276	<i>Paraliparis</i> sp. cf. <i>dactylosus</i> (Orr and Baldwin)							2 (4/4)			2 (8/8)	2 (5/5)	
22277	<i>Paraliparis</i> sp. cf. <i>ulochir</i> (Orr and Baldwin)										2 (2/2)		

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
22281	<i>Paraliparis grandis</i>	grand snailfish										1 (2/2)	
22282	<i>Paraliparis</i> sp. cf. <i>pectoralis</i> (Orr and Baldwin)	rusty snailfish							2 (2/2)		2 (1/1)	2 (4/3)	2 (2/1)
22283	<i>Paraliparis penicillus</i>	comet snailfish							1 (1/1)		1 (1/1)	1 (1/1)	
22300	Melamphaidae	bigscale unident.				1 (4/0)				1 (1/0)			1 (1/0)
22310	<i>Poromitra curilensis</i> (= <i>crassiceps</i> )	crested bigscale	2 (2/0)				2 (2/0)	1 (2/0)	1 (5/0)	1 (14/1)	1 (10/1)	1 (3/1)	
22320	<i>Melamphaes lugubris</i>	highsnout bigscale		1 (1/0)			1 (2/0)	1 (3/2)	1 (7/0)	1 (6/1)	1 (8/1)	1 (11/1)	
22390	<i>Allocyttus folletti</i>	oxeye oreo	1 (1/0)	1 (1/0)			1 (1/0)				1 (1/1)		
22400	Melanostomiinae	scaleless dragonfish unident.		1 (1/0)									
22410	<i>Tactostoma macropus</i>	longfin dragonfish	1 (3/0)	1 (1/0)			1 (4/0)	1 (1/0)	1 (2/0)	1 (1/0)	1 (2/1)		
22461	<i>Caristius macropus</i>	manefish									1 (1/1)		
22500	<i>Merluccius productus</i>	Pacific hake										1 (1/1)	
22570	<i>Anotopterus nikparini</i>	North Pacific daggertooth								1 (1/0)			
22600	Myctophidae	lanternfish unident.	1 (57/0)	1 (36/0)	1 (6/0)	1 (52/0)	1 (20/0)	1 (37/0)	1 (18/3)	1 (3/0)			

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
22601	<i>Stenobrachius</i> sp.								1 (45/0)	1 (38/0)	1 (118/0)	1 (28/0)	1 (93/0)
22602	<i>Stenobrachius leucopsarus</i>	northern lampfish							2 (4/2)	2 (68/1)	2 (61/0)	2 (109/0)	2 (39/0)
22603	<i>Stenobrachius nannochir</i>	garnet lampfish							2 (23/1)	2 (5/0)	2 (22/1)	2 (2/0)	
22610	<i>Diaphus theta</i>	California headlightfish		1 (13/0)			1 (7/0)	1 (14/0)		1 (4/0)	1 (15/0)	1 (9/0)	1 (3/0)
22620	<i>Lampanyctus</i> sp.			2 (5/0)					2 (20/0)	2 (1/1)	2 (2/0)	2 (5/0)	2 (1/0)
22623	<i>Nannobrachium ritteri</i>	broadfin lanternfish					1 (2/0)			1 (6/1)			
22624	<i>Nannobrachium regale</i>	pinpoint lampfish			1 (2/0)				1 (1/1)		1 (4/1)	1 (3/1)	1 (2/0)
22625	<i>Lampanyctus jordani</i>	brokenline lampfish			1 (1/0)			1 (6/0)	1 (4/3)	1 (28/1)	1 (55/0)	1 (21/1)	1 (21/1)
22648	<i>Protomyctophum</i> sp.								1 (3/2)	1 (2/0)			
22649	<i>Protomyctophum thompsoni</i>	northern flashlightfish							2 (1/0)	1 (1/1)			
22701	Nemichthysidae	snipe eel unident.								1 (1/1)			
22704	<i>Avocettina infans</i>	blackline snipe eel								1 (3/2)	1 (2/1)	1 (1/0)	
22810	<i>Polyacanthonotus challengerii</i>								1 (1/1)				
22815	<i>Notacanthus chemnitzii</i>	snubnosed spiny eel								1 (1/1)	1 (1/1)	1 (1/1)	

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
22900	Oneirodidae	dreamer unident.		1 (1/0)			1 (3/0)			1 (1/0)			
22912	<i>Oneirodes</i> sp.			1 (6/0)	1 (8/0)		1 (8/0)	1 (1/0)	1 (17/6)	1 (14/0)	1 (3/0)	1 (5/1)	1 (4/0)
22914	<i>Oneirodes bulbosus</i>	hairy-lure dreamer							1 (11/5)	1 (5/5)	1 (9/1)	1 (4/2)	1 (2/0)
22915	<i>Oneirodes thompsoni</i>							1 (1/0)	1 (9/9)	1 (12/10)	1 (18/1)	1 (17/7)	1 (6/0)
22920	<i>Gigantactis vanhoeffeni</i>	whipnose							1 (1/1)				
23010	<i>Thaleichthys pacificus</i>	eulachon	1 (4/0)	1 (14/0)	1 (11/0)	1 (15/0)	1 (9/0)	1 (7/0)	1 (2/0)	1 (12/0)	1 (14/0)	1 (13/0)	1 (21/0)
23041	<i>Mallotus villosus</i>	capelin	1 (1/0)	1 (8/0)									
23220	<i>Oncorhynchus tshawytscha</i>	chinook salmon	1 (1/0)		1 (2/0)	1 (1/0)		1 (1/0)					1 (1/0)
23230	<i>Oncorhynchus gorbuscha</i>	pink salmon										1 (1/0)	
23235	<i>Oncorhynchus keta</i>	chum salmon			1 (4/0)	1 (4/0)	1 (3/0)			1 (4/0)	1 (4/0)	1 (2/0)	1 (3/0)
23240	<i>Oncorhynchus nerka</i>	sockeye salmon					1 (7/0)						
23602	<i>Benthalbella</i> sp.									1 (2/1)			
23603	<i>Benthalbella dentata</i>	northern pearleye					1 (1/0)	1 (1/0)	1 (3/3)	1 (6/4)	1 (8/0)	1 (1/0)	1 (1/1)
23620	<i>Scopelosaurus harryi</i>	scaly paperbone		2 (2/0)		2 (1/0)		2 (2/0)					2 (1/0)

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
23622	<i>Scopelosaurus adleri</i>	Adlers waryfish								2 (1/1)		2 (1/1)	2 (1/1)
23657	<i>Alepisaurus ferox</i>	longnose lancetfish					1 (2/0)	1 (1/0)		1 (1/0)	1 (5/1)	1 (1/0)	1 (1/0)
23710	<i>Sagamichthys abei</i>	shining tubeshoulder									1 (2/2)	1 (2/1)	1 (1/0)
23800	Stichaeidae	prickleback unident.	1 (1/0)					1 (1/0)					
23836	<i>Lumpenella longirostris</i>	longsnout prickleback	1 (12/0)	1 (22/0)	1 (58/0)	1 (26/0)	1 (10/0)	1 (4/1)	1 (9/0)	1 (9/0)	1 (3/0)	1 (5/1)	
23862	<i>Bryozoichthys marjorius</i>	pearly prickleback										1 (1/1)	1 (1/1)
23962	<i>Macropinna microstoma</i>	barreleye	1 (3/0)			1 (2/0)			1 (5/0)	1 (3/2)	1 (3/1)	1 (5/0)	1 (6/0)
24001	<i>Zaprora silenus</i>	prowfish	1 (11/0)	1 (30/0)	1 (51/0)	1 (14/0)	1 (13/0)	1 (3/0)	1 (7/0)	1 (9/0)	1 (6/0)	1 (9/2)	
24100	Zoarcidae	eelpout unident.	1 (9/0)	1 (8/0)	1 (9/0)		1 (6/0)	1 (33/0)					
24109	<i>Bothrocara</i> cf. <i>brunneum</i> group										1 (6/1)		
24110	<i>Bothrocara brunneum</i>	twoline eelpout	3 (45/0)	3 (77/0)	3 (48/0)	3 (65/0)	3 (25/0)	3 (71/3)	3 (88/4)	1 (68/10)	1 (59/0)	1 (45/0)	
24111	<i>Bothrocara pusillum</i>	Alaska eelpout							1 (1/1)	1 (12/6)	1 (2/2)	1 (1/1)	1 (3/2)
24112	<i>Bothrocara zestum</i>	western eelpout								1 (84/9)	1 (73/2)	1 (78/1)	
24114	<i>Bothrocara nyx</i>	shadow eelpout						1 (1/1)	1 (1/1)	1 (9/7)	1 (7/5)	1 (6/5)	

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
24115	<i>Bothrocara hollandi</i>	Japan-sea eelpout									1 (1/1)		1 (1/1)
24130	<i>Lycenchelys crotalinus</i>	snakehead eelpout			2 (2/0)				1 (13/2)	1 (10/2)	1 (17/0)	1 (3/1)	1 (6/0)
24150	<i>Lycenchelys</i> sp.							1 (2/2)	1 (1/1)				
24152	<i>Lycenchelys camchatica</i>	Kamchatka eelpout				3 (5/0)					1 (4/4)	2 (5/0)	3 (1/1)
24153	<i>Lycenchelys ratmanovi</i>						1 (1/1)		1 (2/2)	1 (3/3)	1 (1/1)	1 (1/1)	
24158	<i>Lycodapus endemoscotus</i>	deepwater eelpout										1 (2/2)	
24160	<i>Lycodapus fierasfer</i>	blackmouth eelpout		3 (2/0)					2 (11/8)	2 (13/8)	2 (4/1)	1 (3/3)	1 (3/3)
24166	<i>Lycodapus psarostomatus</i>						1 (1/1)					1 (1/1)	
24180	<i>Lycodes</i> sp.			1 (1/0)		1 (16/0)				1 (1/1)		1 (2/2)	
24185	<i>Lycodes palearis</i>	wattled eelpout	1 (1/0)	1 (15/0)	1 (32/0)	1 (21/0)	1 (6/0)	1 (1/0)		1 (1/0)			
24187	<i>Lycodes concolor</i>	ebony eelpout		1 (14/0)	1 (83/0)	1 (116/0)	1 (19/0)		1 (46/9)	1 (43/1)	1 (72/0)	1 (53/2)	1 (56/0)
24191	<i>Lycodes brevipes</i>	shortfin eelpout		1 (18/0)	1 (31/0)	1 (123/0)	1 (3/0)			1 (8/0)	1 (7/0)		1 (4/0)
24195	<i>Lycodes beringi</i>	Bering eelpout	1 (1/0)	1 (49/1)	1/102/0	1 (19/0)	1 (86/0)		1 (46/1)	1 (73/1)	1 (126/2)	1 (98/3)	1 (94/0)
24220	<i>Bothrocara</i> sp.			1 (37/0)	1 (98/0)	1 (135/0)			1 (1/1)		1 (6/6)	1 (3/3)	1 (2/2)

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
24230	<i>Lycodapus</i> sp.			1 (29/0)					1 (5/5)	1 (17/17)	1 (44/2)	1 (14/7)	1 (11/9)
24231	<i>Lycodapus poecilus</i>	variform eelpout							1 (1/1)	1 (1/1)		1 (5/5)	1 (26/23)
24232	<i>Lycodapus parviceps</i>	smallhead eelpout											1 (1/1)
24234	<i>Lycodapus leptus</i>	slender eelpout											1 (2/2)
24394	<i>Puzanovia rubra</i>	coral eelpout		1 (1/0)						1 (1/1)	1 (1/1)		1 (1/1)
30010	<i>Sebastolobus</i> sp.	thornyhead unident.					1 (1/0)						
30020	<i>Sebastolobus alascanus</i>	shortspine thornyhead	1 (4/0)	1 (80/0)	1 (162/0)	1 (209/0)	1 (86/0)	1 (42/0)	1 (69/0)	1 (90/1)	1 (149/1)	1 (125/0)	1 (140/0)
30025	<i>Sebastolobus macrochir</i>	broadfin thornyhead		3 (5/0)	3 (7/0)	3 (2/0)			1 (1/1)	1 (2/2)	1 (5/3)	1 (4/1)	
30030	<i>Sebastolobus altivelis</i>	longspine thornyhead		1 (1/0)	1 (1/0)					1 (2/2)			1 (2/1)
30040	<i>Sebastes</i> sp.	rockfish unident. rougheye and blackspotted rockfish	1 (4/0)	1 (4/0)			1 (21/0)	1 (2/0)	1 (2/1)	1 (2/2)	1 (2/2)		1 (1/0)
30050		unident.		1 (3/0)	1 (33/0)	1 (97/0)	1 (137/0)	1 (24/0)	1 (31/0)	1 (17/3)	1 (30/0)	1 (49/1)	
30051	<i>Sebastes aleutianus</i>	rougheye rockfish									2 (23/0)	2 (25/0)	
30052	<i>Sebastes melanostictus</i>	blackspotted rockfish									2 (32/1)	2 (29/0)	

Table 1. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
30060	<i>Sebastodes alutus</i>	Pacific ocean perch	1 (28/0)	1 (54/0)	1 (101/0)	1 (164/0)	1 (67/0)	1 (51/0)	1 (28/0)	1 (53/0)	1 (99/1)	1 (75/0)	1 (91/0)
30100	<i>Sebastodes brevispinis</i>	silvergray rockfish											1 (1/0)
30150		dusky and dark rockfishes unid		1 (2/0)	1 (12/0)	1 (2/0)		1 (2/0)					
30152	<i>Sebastodes variabilis</i>	dusky rockfish								1 (3/0)	1 (3/0)	1 (1/0)	1 (3/0)
30420	<i>Sebastodes pollyspinis</i>	northern rockfish		1 (6/0)	1 (24/0)	1 (19/0)	1 (1/0)	1 (3/0)	1 (1/0)	1 (6/0)	1 (6/0)	1 (1/0)	1 (3/0)
30475	<i>Sebastodes babcocki</i>	redbanded rockfish			1 (3/0)	1 (4/0)					1 (1/1)	1 (2/0)	1 (1/1)
30576	<i>Sebastodes borealis</i>	shortraker rockfish		1 (34/0)	1 (89/0)	1 (126/0)	1 (14/0)	1 (17/0)	1 (22/1)	1 (21/0)	1 (42/1)	1 (30/0)	1 (41/0)

Table 2.—Identification confidence indexes (1 = high confidence, 2 = moderate confidence, 3 = low confidence), followed in parentheses by frequency of occurrence and numbers of vouchered lots collected, for all taxa of invertebrates recorded during Bering Sea upper continental slope surveys from 1976 through 2010. Number of tows conducted during each survey year are in parentheses below the survey year. Taxa are sorted by RACE species codes (RACE 2012).

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
40500	Scyphozoa	jellyfish unident.	1 (3/0)	1 (18/0)			1 (108/0)	1 (72/0)	1 (37/2)	1 (31/0)	1 (37/0)	1 (21/0)	1 (55/0)
40501	<i>Chrysaora</i> sp.	chrysaora jellyfish								1 (2/0)	1 (1/0)		
40502	<i>Periphylla</i> sp.							1 (2/0)					
40503	<i>Periphylla periphylla</i>							1 (12/0)	1 (13/0)	1 (27/0)	1 (36/0)	1 (27/0)	
40504	<i>Chrysaora melanaster</i>							1 (32/0)	1 (77/0)	1 (116/0)	1 (33/0)	1 (54/0)	
40505	<i>Phacellophora camtschatica</i>	egg yolk jelly									1 (17/0)	1 (29/0)	
40506	<i>Aequorea</i> sp.						1 (18/0)	1 (19/0)	1 (16/0)	1 (9/0)	1 (20/0)		
40510	<i>Atolla</i> sp.										1 (41/0)	1 (33/0)	
40511	<i>Aurelia</i> sp.						1 (13/0)	1 (3/0)				1 (4/0)	
40512	<i>Aurelia labiata</i>						1 (4/0)	1 (6/0)	1 (1/0)				
40513	<i>Aurelia aurita</i>									1 (2/0)			
40560	<i>Cyanea</i> sp.						1 (8/0)						
40561	<i>Cyanea capillata</i>	lion's mane					1 (19/0)		1 (22/0)	1 (1/0)	1 (3/0)		
41099	Octocorallia							1 (2/1)					

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
41201	<i>Gersemia</i> sp.	sea raspberry								1 (3/1)			1 (1/0)
41300	<i>Anthomastus</i> sp.									1 (2/0)		1 (1/0)	1 (2/0)
41331	<i>Anthomastus</i> sp. A	red anthomastus									1 (1/0)		
41500	Gorgonacea	gorgonian coral unident.							1 (3/0)		1 (1/1)		1 (1/0)
41520	<i>Primnoa</i> sp.												1 (3/0)
41522	<i>Primnoa willeyi</i>	red tree coral							2 (3/0)	2 (2/1)		2 (1/0)	
41530	<i>Chrysopathes speciosa</i>										1 (1/1)		
41550	<i>Parantipathes</i> sp.								1 (1/1)				
41553	<i>Lillipathes</i> sp. B (Clark 2006)											1 (1/1)	
41570	<i>Swiftia</i> sp.								1 (2/2)		1 (2/2)		1 (10/0)
41573	<i>Swiftia beringi</i>											1 (4/0)	
41582	<i>Paragorgia arborea</i>	Kamchatka coral							1 (4/1)	1 (9/0)	1 (5/0)	1 (7/0)	1 (6/0)
41752	<i>Clavularia incrassata</i>	encrusting coral										1 (1/0)	1 (3/0)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
42003	Virgulariidae	sea whip unident.							1 (2/1)	1 (3/1)	1 (14/0)	1 (1/0)	
42004	<i>Stylatula</i> sp.	slender seawhips								1 (1/0)			1 (10/0)
42007	<i>Protoptilum</i> sp.									1 (1/1)			
42008	<i>Halipteris</i> sp.											1 (5/0)	
42012	<i>Halipteris willemoesi</i>									1 (5/0)	1 (6/0)	1 (1/0)	
42015	<i>Ombellula</i> sp.									1 (1/1)			
42021	<i>Anthoptilum murrayi</i>	Murray sea pen										1 (4/0)	1 (1/0)
43000	Actiniaria	sea anemone unident.	1 (39/0)	1 (16/0)			1 (38/0)	1 (32/0)	1 (15/7)	1 (31/2)	1 (61/2)	1 (35/3)	1 (9/0)
43001	<i>Actinauge verrilli</i>	reticulate anemone							1 (22/3)	1 (40/0)	1 (53/1)	1 (36/0)	1 (51/0)
43002	<i>Paractinostola faeculenta</i>	rough purple sea anemone						1 (27/8)	1 (19/1)	1 (32/0)	1 (46/0)	1 (39/0)	
43003	<i>Actinoscyphia</i> sp.										3 (1/0)	3 (4/0)	
43005	<i>Actinernus</i> sp.											3 (1/0)	
43006		purple striated sea anemone									3 (4/0)	3 (1/0)	

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
43007		red striated sea anemone										3 (11/0)	
43009	<i>Corallimorphus</i> sp.											1 (1/1)	
43021	<i>Metridium farcimen</i>	gigantic anemone										1 (2/0)	1 (2/0)
43029	<i>Stomphia didemon</i>	cowardly anemone										3 (10/0)	
43030	<i>Stomphia</i> sp.								3 (10/4)	3 (20/0)	3 (15/0)	3 (13/0)	3 (19/0)
43032	<i>Stomphia coccinea</i>	swimming anemone						3 (3/1)	3 (10/0)	3 (6/0)	3 (9/0)	3 (4/0)	
43040	<i>Urticina</i> sp.				3 (3/0)		3 (2/1)					3 (9/0)	
43042	<i>Urticina crassicornis</i>	mottled anemone							1 (1/0)			1 (3/0)	
43043	<i>Urticina lofotensis</i>								1 (6/0)				
43050	<i>Oractis diomedae</i>	grape anemone									1 (2/0)	1 (6/0)	
43082	<i>Cribrinopsis fernaldi</i>	chevron-tentacled anemone						1 (5/2)	1 (1/0)	1 (9/0)	1 (15/0)	1 (4/0)	
43090	<i>Liponema brevicornis</i>	tentacle-shedding anemone						1 (59/0)	1 (94/0)	1 (145/0)	1 (127/0)	1 (141/0)	
43100	Actinostolidae						1 (2/1)	1 (18/1)	1 (12/1)	1 (13/0)	1 (60/0)		

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
43111	<i>Actinistola</i> sp. A (Clark 2006)										3 (1/0)	3 (1/0)	
43115	<i>Sicyonis</i> sp. A (Clark 2006)	orange actinistolid									3 (1/0)		
43200	Hormathiidae											3 (2/0)	
43226	Zoanthidae sp. 1	hot-dog sea zoanthid							1 (2/1)				1 (5/0)
44000	Scleractinia	stony coral unident.						1 (1/0)					
44083	<i>Plumarella</i> sp.							3 (3/0)					
44084	Isididae unident.	Bamboo coral unident.								1 (1/0)			
44085	<i>Isidella</i> sp.	articulated bamboo coral					1 (4/2)	1 (6/0)	1 (4/0)	1 (7/1)	1 (4/0)		
44088	<i>Keratoisis</i> sp.	nodal bamboo coral unident.					1 (1/1)		1 (1/0)			1 (1/0)	
44094	<i>Amphilaphis</i> sp.						3 (5/0)	3 (5/1)	3 (3/0)	3 (7/0)	3 (6/0)		
44103	<i>Muriceides</i> sp. cf. <i>cylindrica</i> (Bayer et al.)											3 (1/0)	
45000	Ctenophora	comb jelly unident.				1 (1/0)							
45005	<i>Beroe</i> sp.						1 (1/0)			1 (1/0)	1 (1/0)		

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
45010		<i>Beroe abyssicola</i>											1 (1/0)
50000	Polychaeta	polychaete worm unident.					1 (1/0)		1 (2/1)	1 (5/0)	1 (8/0)	1 (3/0)	1 (10/0)
50001		worm unident.							1 (1/1)	1 (6/0)	1 (3/1)		1 (1/0)
50010		tube worm unident.							1 (3/1)	1 (4/2)	1 (2/0)		
50021		<i>Spinther</i> sp. A (Clark 2006)											1 (1/0)
50160	Aphroditidae	sea mouse unident.	1 (1/0)	1 (5/0)			1 (17/0)		1 (11/0)	1 (40/0)			
50161		<i>Aphrodita</i> sp.							1 (23/0)	1 (34/0)	1 (109/0)	1 (107/0)	1 (4/0)
50190		<i>Aphrodita japonica</i>		3 (2/0)									
50192		<i>Aphrodita negligens</i>						3 (1/0)					3 (113/0)
50215		<i>Onuphis conchylega</i>	gravel tube worm										1 (1/0)
54010		<i>Nereis</i> sp.		1 (1/0)									
56300	Polynoidae	scale worm unident.	1 (11/0)	1 (9/0)			1 (1/0)	1 (5/0)		1 (5/0)			
56311		<i>Eunoe nodosa</i>	giant scale worm				2 (5/0)						

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
56312	<i>Eunoe depressa</i>	depressed scale worm					2 (5/0)		2 (1/0)		2 (1/0)		
57412	<i>Serpula</i> sp.										1 (1/0)	1 (2/0)	
59000		bristle worm unident.		1 (1/0)									
59100	Hirudinea	leech unident.		1 (1/0)									
59110	<i>Carcinobdella</i> sp.										1 (1/0)		
59111	<i>Notostomum cyclostomum</i>	striped sea leech							1 (5/0)		1 (4/0)	1 (9/0)	
59120	<i>Notostomobdella</i> sp.			1 (4/0)									
60100	Amphipoda	amphipod unident.										1 (1/0)	
62000	Isopoda	isopod unident.		1 (2/0)					1 (3/1)	1 (7/0)			
62025	<i>Rocinella angusta</i>											1 (3/0)	
62050	<i>Anuropus bathypelagica</i>								1 (2/2)		1 (4/1)		
63500	Euphausiacea	euphausiid unident.		1 (1/0)							1 (1/0)		
64000	Mysida	opossum shrimps							1 (3/1)	1 (1/0)			

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
64010	<i>Neognathophausia</i> sp.								1 (1/0)	1 (1/0)		1 (5/0)	
64011	<i>Neognathophausia gigas</i>	giant red mysid										1 (4/0)	1 (13/0)
64012	<i>Neognathophausia ingens</i>	red mysid							1 (2/1)	1 (3/1)	1 (12/0)		
64100	Mysidae											1 (1/0)	
65000	Cirripedia			1 (1/0)									
65100	Thoracica	barnacle unident.										1 (1/0)	
65101	<i>Lepas</i> sp.		1 (1/0)										
65201	<i>Balanus</i> sp.								1 (2/0)	1 (1/0)			
65203	<i>Balanus evermanni</i>	giant barnacle							1 (2/0)	1 (2/0)	1 (2/0)	1 (3/0)	1 (3/0)
65210	<i>Scalpellum cornutum</i>	eared barnacle									1 (3/0)		1 (1/0)
66000		shrimp unident.	1 (8/0)	1 (6/0)	1 (1/0)	1 (4/0)	1 (4/0)	1 (3/1)	1 (17/11)	1 (1/1)	1 (1/0)		
66004	<i>Sergestes</i> sp.				1 (3/0)						1 (1/1)		
66005	<i>Sergestes similis</i>	Pacific sergestid									1 (3/0)	1 (2/0)	

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
66019	Pandalidae	pandalid shrimp unident.			1 (21/0)	1 (3/0)		1 (1/0)			1 (3/0)		
66020	<i>Pandalus</i> sp.				2 (2/0)	2 (10/0)	2 (1/0)	2 (3/0)					
66025	<i>Pandalus danae</i>	dock shrimp			1 (1/0)								
66030	<i>Pandalus jordani</i>	ocean shrimp										1 (3/1)	
66031	<i>Pandalus eous</i>	Alaskan pink shrimp	1 (40/0)	1 (58/0)	1 (66/0)	1 (31/0)	1 (50/0)	1 (30/0)	1 (20/0)	1 (55/0)	1 (75/0)	1 (59/0)	1 (64/0)
66033	<i>Pandalus tridens</i>	yellowleg pandalid	1 (4/0)				1 (5/0)			1 (7/0)	1 (10/1)	1 (2/0)	1 (4/0)
66059	<i>Pandalopsis</i> sp.											1 (2/0)	
66060	<i>Pandalopsis aleutica</i>					1 (8/0)		1 (23/1)			1 (42/0)		1 (24/0)
66061	<i>Pandalopsis longirostris</i>											1 (4/0)	1 (3/0)
66120	<i>Pandalopsis dispar</i>	sidestripe shrimp	1 (10/0)	1 (37/0)	1 (93/0)	1 (90/0)	1 (49/0)	1 (19/0)	1 (34/0)	1 (41/0)	1 (55/0)	1 (51/0)	1 (51/0)
66130	<i>Pandalopsis ampla</i>							1 (3/2)	1 (31/2)	1 (1/0)	1 (36/0)	1 (2/0)	
66145	Caridea unident.	caridid shrimp unident.									1 (3/0)	1 (2/0)	
66150	Hippolytidae	hippolytid shrimp unident.					1 (3/0)		1 (7/1)				

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
66170	<i>Eualus</i> sp.								1 (2/1)	1 (34/0)	1 (10/1)	1 (6/0)	1 (5/0)
66171	<i>Eualus barbatus</i>	barbed eualid					1 (1/0)			1 (1/0)	1 (2/1)		1 (3/0)
66174	<i>Eualus fabricii</i>	Arctic eualid						1 (1/0)					
66175	<i>Eualus gaimardii</i>							1 (1/0)					
66179	<i>Eualus macilentus</i>	Greenland shrimp							1 (1/0)				
66190	<i>Eualus biunguis</i>	deepsea eualid								1 (49/0)	1 (44/0)		
66193	<i>Eualus suckleyi</i>	shortscale eualid						1 (38/0)			1 (1/0)		
66200	<i>Lebbeus</i> sp.						1 (7/0)			1 (2/1)	1 (1/0)		
66203	<i>Lebbeus groenlandicus</i>	spiny lebbeid						1 (2/0)	1 (3/0)	1 (6/0)	1 (2/0)	1 (5/0)	
66204	<i>Lebbeus polaris</i>							1 (3/0)					
66500	Crangonidae	crangonid shrimp unident.	1 (7/0)		1 (9/0)				1 (1/1)			1 (1/0)	
66502	<i>Crangon</i> sp.							1 (13/1)	1 (1/0)	1 (1/0)	1 (1/0)	1 (1/0)	
66510	<i>Crangon abyssorum</i>	abyssal crangon					1 (1/0)						

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
66512	<i>Crangon alaskensis</i>	shell shrimp										1 (1/0)	
66515	<i>Crangon communis</i>	twospine crangon	1 (2/0)				1 (2/0)			1 (6/0)	1 (18/0)	1 (9/0)	1 (1/0)
66530	<i>Crangon dalli</i>	ridged crangon	1 (2/0)				1 (1/0)				1 (2/0)		1 (14/0)
66535	<i>Metacrangon variabilis</i>	deepsea spinyhead											1 (1/0)
66570	<i>Argis</i> sp.		1 (16/0)	1 (1/0)			1 (13/0)			1 (1/0)	1 (1/0)	1 (6/0)	
66580	<i>Argis dentata</i>	Arctic argid					2 (1/0)		2 (4/0)	2 (20/0)		2 (10/1)	2 (32/0)
66611	<i>Argis lar</i>	kuro argid		2 (1/0)						2 (2/0)	2 (17/0)	2 (12/0)	
66750	Pasiphaeidae	pasiphaeid shrimp unident.		1 (16/0)	1 (1/0)								1 (3/2)
66770	<i>Pasiphaea pacifica</i>	Pacific glass shrimp					1 (8/0)		1 (9/0)	1 (25/0)	1 (41/1)	1 (32/0)	1 (48/0)
66772	<i>Pasiphaea tarda</i>	crimson pasiphaeid					1 (8/0)	1 (2/0)	1 (6/1)	1 (2/0)	1 (9/0)	1 (4/0)	1 (10/0)
66814	<i>Notostomus</i> sp.											3 (1/1)	
66815	<i>Notostomus japonicus</i>	spinyridge shrimp								1 (1/0)	1 (5/0)	1 (1/0)	1 (3/0)
66839	<i>Hymenodora</i> sp.		3 (11/0)										

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
66840	<i>Hymenodora frontalis</i>	Pacific ambereye									1 (2/1)	1 (5/0)	1 (4/0)
66841	<i>Bentheogenennema borealis</i>									1 (1/1)		1 (8/0)	1 (10/0)
66865	<i>Acanthephyra curtirostris</i>	peaked shrimp											1 (1/0)
68000		crab unident.		1 (94/0)				1 (1/0)		1 (2/2)		1 (1/1)	
68500	Majidae	spider crabs unident.										1 (2/2)	
68502	<i>Oregonia bifurca</i>												1 (3/0)
68510	<i>Oregonia gracilis</i>	graceful decorator crab								1 (4/0)	1 (1/0)	1 (1/0)	
68520	<i>Chorilia longipes</i>	Longhorned decorator crab									1 (8/0)	1 (6/0)	1 (8/0)
68541	<i>Chionoecetes</i> sp.	Tanner crab unident.	1 (1/0)	1 (6/0)				1 (4/0)			1 (3/0)		
68550	<i>Chionoecetes tanneri</i>	grooved Tanner crab	1 (1/0)	1 (4/0)		1 (63/0)	1 (38/0)	1 (6/0)	1 (51/0)	1 (73/1)	1 (94/0)	1 (98/0)	1 (90/0)
68560	<i>Chionoecetes bairdi</i>	Tanner crab	1 (34/0)	1 (24/0)		1 (28/0)	1 (13/0)	1 (1/0)	1 (14/0)	1 (41/0)	1 (57/0)	1 (44/0)	1 (64/0)
68570	<i>Chionoecetes angulatus</i>	triangle Tanner crab		1 (18/0)		1 (1/0)	1 (43/0)	1 (8/0)	1 (65/0)	1 (92/1)	1 (107/1)	1 (96/0)	1 (78/0)
68577	<i>Hyas coarctatus</i>	circumboreal toad crab	1 (1/0)			1 (1/0)				1 (1/0)			

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
68578	<i>Hyas lyratus</i>	Pacific lyre crab	1 (5/0)				1 (3/0)		1 (2/0)	1 (18/0)	1 (40/0)	1 (22/0)	1 (23/0)
68580	<i>Chionoecetes opilio</i>	snow crab	1 (26/0)	1 (28/0)		1 (5/0)	1 (2/0)	1 (1/0)	1 (11/0)	1 (29/0)	1 (21/0)	1 (19/0)	1 (34/0)
68590	<i>Chionoecetes</i> hybrid	hybrid tanner crab	2 (27/0)	2 (10/0)						2 (6/0)		2 (5/0)	2 (14/0)
69010	Paguridae	hermit crab unident.	1 (13/0)	1 (7/0)			1 (7/0)	1 (4/0)	1 (1/0)	1 (1/0)			
69035	<i>Pagurus</i> sp.							1 (10/3)	1 (1/0)	1 (1/1)	1 (1/0)	1 (4/0)	
69042	<i>Pagurus brandti</i>	sponge hermit				1 (1/0)		1 (4/0)	1 (4/0)	1 (3/0)	1 (1/0)	1 (2/0)	
69050	<i>Pagurus townsendi</i>	Townsend hermit crab								1 (11/11)			1 (50/0)
69060	<i>Pagurus aleuticus</i>	Aleutian hermit	3 (1/0)			3 (4/0)		3 (26/0)	3 (27/1)	3 (69/18)	3 (67/0)	3 (4/0)	
69061	<i>Labidochirus splendescens</i>	splendid hermit	1 (1/0)					1 (1/1)	1 (4/0)	1 (2/1)	1 (1/0)	1 (6/0)	
69070	<i>Pagurus confragosus</i>	knobbyhand hermit	1 (6/0)			1 (6/0)		1 (1/0)	1 (26/0)	1 (19/6)	1 (14/0)	1 (9/0)	
69080	<i>Pagurus cornutus</i>		1 (7/0)					1 (4/1)	1 (26/0)	1 (71/24)	1 (50/0)	1 (56/0)	
69082	<i>Pagurus dalli</i>	whiteknee hermit											1 (1/0)
69086	<i>Pagurus trigonocheirus</i>	fuzzy hermit crab	1 (2/0)			1 (8/0)			1 (7/0)	1 (9/3)	1 (9/0)	1 (14/0)	

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
69090	<i>Pagurus ochotensis</i>	Alaskan hermit								1 (1/0)	1 (3/1)	1 (1/0)	1 (1/0)
69095	<i>Pagurus Rathbuni</i>	longfinger hermit					1 (3/0)		1 (5/0)	1 (38/0)			1 (2/0)
69100	<i>Pagurus tanneri</i>	longhand hermit					1 (5/0)		1 (1/0)				1 (5/0)
69110	<i>Elassochirus tenuimanus</i>	widehand hermit crab	1 (1/0)						1 (1/0)				
69120	<i>Pagurus capillatus</i>	hairy hermit crab	1 (1/0)										
69121	<i>Elassochirus cavimanus</i>	purple hermit	1 (10/0)				1 (2/0)		1 (2/0)	1 (9/0)	1 (16/0)	1 (10/0)	1 (16/0)
69250	Lithodidae	stone crab unident.								1 (4/2)	1 (2/2)	1 (2/0)	
69285	<i>Acantholithodes hispidus</i>	fuzzy crab							1 (1/0)				
69290	<i>Lithodes</i> sp.								1 (3/1)	1 (1/1)			
69300	<i>Lithodes couesi</i>	scarlet king crab	1 (1/0)			1 (4/0)	1 (3/0)	1 (1/0)	1 (31/0)	1 (22/1)	1 (30/0)	1 (30/0)	1 (35/0)
69310	<i>Lithodes aequispinus</i>	golden king crab	1 (13/0)	1 (16/0)		1 (26/0)	1 (23/0)	1 (8/0)	1 (32/0)	1 (46/0)	1 (58/0)	1 (62/0)	1 (93/0)
69321	<i>Paralithodes</i> sp.		1 (1/0)										
69330	<i>Paralomis</i> sp.								1 (1/1)			1 (1/0)	

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
69331	<i>Paralomis verrilli</i>										1 (2/0)	1 (1/1)	1 (2/0)
69332	<i>Paralomis</i> sp. A (Clark 2006)											1 (1/1)	1 (1/0)
69335	<i>Paralomis multispina</i>						1 (2/0)		1 (6/0)	1 (13/0)	1 (21/0)	1 (26/0)	1 (13/0)
69400	<i>Erimacrus isenbeckii</i>	horsehair crab	1 (12/0)	1 (1/0)		1 (1/0)					1 (1/0)	1 (1/0)	1 (3/0)
69520	<i>Hyas</i> sp.					1 (1/0)	1 (1/0)			1 (1/1)			
69551	<i>Munidopsis verrilli</i>	Verrill pinch bug											1 (2/0)
69552	<i>Munidopsis</i> sp.												1 (1/0)
69556	<i>Munida quadrispina</i>	pinchbug											1 (1/0)
69900	Pycnogonida	sea spider unident.	1 (1/0)					1 (6/3)	1 (13/0)	1 (9/4)	1 (6/1)	1 (11/0)	
69910	<i>Colossendeis</i> sp.												1 (6/0)
70060	<i>Neomenia</i> sp.						1 (2/1)	1 (5/0)	1 (6/1)	1 (7/0)	1 (1/0)		
70062	<i>Neomenia</i> cf. <i>yamamotoi</i> (Clark 2006)												1 (4/0)
70100	Polyplacophora	chiton unident.								1 (1/1)			

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
70119	<i>Placiphorella</i> sp.												1 (1/0)
70122	<i>Placiphorella pacifica</i>										1 (1/0)		1 (2/0)
70124	<i>Leptochiton</i> sp.												1 (2/0)
71001	gastropod eggs	snail eggs					1 (5/0)	1 (2/0)	1 (14/0)	1 (36/0)	1 (1/0)	1 (40/0)	1 (23/0)
71002	<i>Buccinum</i> sp. eggs								1 (12/0)	1 (6/0)	1 (52/0)	1 (7/0)	1 (35/0)
71003	<i>Fusitriton oregonensis</i> eggs										1 (3/0)	1 (3/0)	
71004	<i>Neptunea</i> sp. eggs									1 (19/1)	1 (21/0)	1 (4/0)	1 (12/0)
71010	Nudibranchia	nudibranch unident.	2 (1/0)	2 (4/0)			2 (2/0)	2 (1/0)	2 (22/7)	2 (22/3)	2 (28/4)	2 (36/2)	2 (2/0)
71012	<i>Tochuina tetraquetra</i>	giant orange tochui											1 (2/1)
71018	<i>Dendronotus</i> sp.												1 (1/0)
71025	<i>Tritonia</i> sp.		1 (1/0)					1 (3/1)	1 (10/1)	1 (6/2)	1 (14/0)	1 (7/0)	
71030	<i>Tritonia diomedea</i>	rosy tritonia							1 (1/0)			1 (4/0)	1 (3/0)
71090	<i>Colga pacifica</i>	Pacific colga										1 (2/0)	1 (1/0)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
71250	Dorididae	dorid nudibranch unident.								1 (1/0)			
71260	<i>Archidoris odhneri</i>	white night doris										1 (3/0)	
71349	<i>Cranopsis</i> sp.	puncterellas										1 (1/0)	
71351	<i>Puncturella rothi</i>											1 (1/0)	
71500	Gastropoda	snail unident.	1 (28/0)	1 (87/0)			1 (10/0)	1 (10/0)		1 (2/2)			
71510	Naticidae										1 (1/0)		
71515	<i>Bulbus fragilis</i>	fragile moonsnail										1 (3/0)	
71526	<i>Cryptonatica affinis</i>	Arctic moonsnail										1 (1/0)	
71530	<i>Natica clausa</i>							1 (4/0)	1 (4/0)				
71535	<i>Cryptonatica</i> <i>(=Natica) aleutica</i>	Aleutian moonsnail								1 (1/0)		1 (3/0)	
71580	<i>Euspira pallida</i>	pale moonsnail					1 (1/1)			1 (3/0)		1 (1/0)	
71583	Lamellariidae	lamellarid unident.									1 (1/1)		
71590	<i>Onchidiopsis</i> sp.											1 (32/1)	

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
71593	<i>Lamellaria</i> sp. C (Clark & McLean)											1 (1/1)	
71710	<i>Colus</i> sp.						2 (2/0)		2 (1/0)	2 (3/1)			2 (2/0)
71715	<i>Colus calathus</i>										2 (1/1)		
71716	<i>Colus martensi</i>									2 (1/1)		2 (2/0)	
71719	<i>Colus jordani</i>										1 (1/1)	1 (3/0)	
71721	<i>Colus herendeenii</i>	thin-ribbed whelk									1 (4/1)		1 (2/0)
71726	<i>Colus spitzbergensis</i>	thick-ribbed whelk	2 (1/0)				2 (1/0)				1 (1/1)		
71730	<i>Colus aphelus</i>	oblique whelk							1 (1/1)	1 (1/1)	1 (1/0)		
71731	<i>Colus halli</i>	shrew whelk											1 (1/0)
71734	<i>Colus trophius</i>							1 (1/1)					
71747	<i>Pyrulofusus</i> sp.										1 (1/0)		
71749	<i>Pyrulofusus dexius</i>											1 (1/0)	
71751	<i>Volutopsis</i> sp. eggs								3 (6/0)	3 (13/0)			

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
71752	<i>Pyrulofusus</i> sp. eggs										3 (4/0)	3 (1/0)	3 (11/0)
71753	<i>Pyrulofusus deformis</i>	warped whelk								1 (2/0)	1 (12/0)	1 (13/0)	1 (14/0)
71755	<i>Pyrulofusus harpa</i>	left-hand whelk	1 (4/0)						1 (1/0)	1 (6/0)	1 (7/0)		
71756	<i>Volutopsius fragilis</i>	fragile whelk					3 (1/0)						
71757	<i>Volutopsius regularis</i>	regular whelk								3 (1/0)			
71759	<i>Volutopsius filosus</i>	threaded whelk				3 (1/0)							
71760	<i>Volutopsius castaneus</i>	volute whelk		3 (1/0)									
71761	<i>Pyrulofusus melonis</i>		1 (4/0)				1 (1/0)		1 (4/0)	1 (21/0)	1 (48/0)	1 (35/0)	1 (47/0)
71764	<i>Volutopsius middendorffii</i>	tulip whelk				3 (1/0)					1 (1/1)		
71769	<i>Beringius</i> sp.							1 (1/1)					
71771	<i>Beringius frielei</i>		1 (7/0)					1 (4/1)	1 (29/1)	1 (58/0)	1 (45/0)	1 (50/1)	
71772	<i>Beringius beringii</i>							3 (1/1)					
71776	<i>Beringius undatus</i>										3 (1/0)		

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
71777	<i>Beringius</i> sp. eggs									1 (4/0)	1 (10/0)		1 (6/0)
71800	<i>Neptunea</i> sp.		1 (1/0)	1 (4/0)		1 (139/0)	1 (2/0)		1 (14/2)	1 (17/0)	1 (1/1)	1 (2/0)	1 (92/2)
71810	<i>Neptunea amianta</i>	white neptune							2 (18/1)	2 (40/1)		2 (31/0)	2 (18/4)
71820	<i>Neptunea pribiloffensis</i>	Pribilof whelk	3 (13/0)	3 (1/0)			3 (16/0)	3 (1/0)	2 (22/0)	2 (55/1)	2 (157/0)	2 (89/0)	2 (8/0)
71822	<i>Neptunea tabulata</i>	tabled whelk										2 (1/0)	
71835	<i>Neptunea borealis</i>					3 (3/0)							
71870	<i>Neptunea lyrata</i>	lyre whelk		2 (1/0)			2 (2/0)			2 (3/0)	2 (1/0)	2 (5/0)	
71882	<i>Neptunea ventricosa</i>	fat whelk										2 (1/0)	
71883	<i>Neptunea insularis</i>							2 (6/1)	2 (2/2)	2 (1/0)			2 (7/3)
71890	<i>Plicifusus</i> sp.		2 (1/0)										
71891	<i>Plicifusus kroyeri</i>							1 (2/0)	1 (1/1)	1 (5/1)	1 (2/0)		
71901	<i>Sulcosinus taphrius</i>	sulcated whelk									1 (1/1)		
71916	<i>Neptunea</i> sp. F (Clark & McLean)												1 (3/0)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
72021	<i>Antiplanes thalea</i>												3 (4/0)
72063	<i>Aforia circinata</i>	keeled aforia					1 (1/0)			1 (2/0)	1 (5/1)	1 (1/0)	1 (3/0)
72065	<i>Boreoscalaelongata</i>	Greenland wentletrap								1 (1/0)	1 (1/0)		1 (1/0)
72395	<i>Scabrotrophon scitulus</i>	spiny trophon											1 (1/0)
72402	<i>Boreotrophon alaskanus</i>	Alaskan trophon								2 (1/0)			2 (3/0)
72404	<i>Boreotrophon rotundatus</i>	rotund trophon											2 (1/0)
72407	<i>Boreotrophon stuarti</i>	winged trophon							2 (1/0)				
72420	<i>Boreotrophon</i> sp.								1 (2/2)				
72500	<i>Fusitriton oregonensis</i>	Oregon triton	1 (14/0)	1 (1/0)			1 (12/0)		1 (7/0)	1 (41/0)	1 (74/0)	1 (59/0)	1 (67/0)
72501	<i>Fusitriton</i> sp.		1 (1/0)										
72511	<i>Calliostoma</i> sp.							1 (1/1)					
72551	<i>Otukaia kiheiziebisu</i>										1 (1/1)	1 (1/0)	
72740	<i>Buccinum</i> sp.		1 (2/0)	1 (4/0)			1 (10/0)		1 (7/2)	1 (6/1)	1 (2/1)	1 (7/2)	1 (6/1)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
72747	<i>Buccinum oedematum</i>	swollen whelk							2 (22/2)	2 (80/0)	2 (127/0)	2 (88/0)	2 (85/1)
72749	<i>Buccinum viridum</i>	turban whelk								2 (1/0)			
72750	<i>Buccinum strigillatum</i>			2 (1/0)					2 (2/1)				
72751	<i>Buccinum plectrum</i>	sinuous whelk	2 (3/0)						2 (2/0)	2 (2/0)		2 (3/0)	
72752	<i>Buccinum scalariforme</i>	ladder whelk	2 (1/0)				2 (17/0)		2 (23/1)		2 (2/0)	2 (3/0)	2 (18/0)
72760	<i>Buccinum castaneum</i>	chestnut whelk									2 (3/0)	2 (2/0)	
72762	<i>Bathybuccinum clarki</i>	Roger's buccinid									2 (1/0)		
72768	<i>Ancistrolepis bicinctus</i>	two-ribbed whelk										2 (1/0)	
72769	<i>Ancistrolepis eucosmius</i>	three-ribbed whelk								2 (7/1)	2 (1/0)	2 (5/0)	
72773	<i>Buccinum costatum</i>	costate whelk						2 (1/1)	2 (6/2)	2 (22/0)	2 (10/1)	2 (10/0)	
72790	<i>Arctomelon stearnsii</i>	Alaska volute	2 (3/0)				2 (4/0)		2 (2/0)	2 (21/0)	2 (38/0)	2 (18/1)	2 (27/0)
72794	<i>Arctomelon</i> sp. cf. <i>stearnsii</i> (Clark & McLean)											2 (1/0)	
72795	<i>Volutomitra alaskana</i>											2 (1/0)	

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
74000	Bivalvia	bivalve unident.								1 (1/1)	1 (2/1)		1 (1/0)
74001	<i>Acharax johnsoni</i>												1 (3/0)
74050	Mytilidae	mussel unident.								1 (1/1)			
74060	<i>Modiolus modiolus</i>	northern horsemussel								1 (3/0)	1 (2/0)	1 (2/0)	
74080	<i>Mytilus edulis</i>	blue mussel								1 (1/0)			
74100	Pectinidae	scallop unident.						1 (1/0)					
74103	<i>Chlamys albida</i>	white scallop											3 (2/0)
74104	<i>Chlamys</i> sp.		1 (1/0)						1 (1/0)		1 (1/0)		
74106	<i>Chlamys rubida</i>	reddish scallop				3 (1/0)			3 (1/0)				
74171	<i>Delectopecten vancouverensis</i>	Vancouver scallop						2 (2/0)	2 (1/0)		2 (5/1)	2 (4/0)	
74342	<i>Acila castrensis</i>	divaricate nutclam											1 (1/0)
74414	<i>Yoldia</i> sp.						1 (1/0)			1 (2/0)		1 (1/0)	
74435	<i>Nuculana</i> sp.							1 (2/1)					

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
74641	<i>Astarte borealis</i>	boreal astarte										1 (1/0)	
74650	<i>Cardita</i> sp.											1 (1/1)	
74656	<i>Cyclocardia</i> sp.											1 (1/0)	
74658	<i>Cyclocardia</i> sp. cf. <i>borealis</i> (Clark 2006)	northern carditid											1 (1/0)
74980	<i>Clinocardium</i> sp.											1 (1/0)	
75284	<i>Serripes</i> sp.											1 (3/0)	
75285	<i>Serripes groenlandicus</i>	Greenland cockle								2 (4/0)	2 (3/0)		2 (1/0)
75286	<i>Serripes laperousii</i>	broad cockle								2 (1/0)			
75287	<i>Serripes notabilis</i>	oblique smoothcockle											2 (1/0)
75382	<i>Bankia setacea</i>	feathery shipworm											3 (2/0)
78005	Cephalopoda unident. eggs	squid or octopus unident. eggs										1 (1/1)	
78006	Decapodiformes unident. eggs	squid unident. egg										1 (1/0)	
78010	Octopodidae	octopus unident.	1 (27/0)	1 (91/0)	1 (100/0)	1 (129/0)	1 (22/0)	1 (11/0)	1 (9/0)	1 (2/2)			1 (1/0)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
78012	<i>Benthoctopus leioderma</i>	smoothskin octopus					3 (14/0)		3 (8/1)	3 (27/1)	2 (78/18)	2 (36/0)	2 (36/0)
78020	<i>Octopus</i> sp.									3 (1/1)		3 (1/0)	
78022	<i>Japetella diaphana</i>							1 (1/1)			1 (5/1)	1 (15/2)	1 (1/0)
78030	<i>Opisthoteuthis californiana</i>	flapjack devilfish		1 (2/0)	1 (1/0)				1 (23/0)	1 (7/1)	1 (19/2)	1 (19/0)	1 (17/0)
78301	<i>Opisthoteuthis</i> sp. cf. <i>californiana</i> (Jorgensen)												1 (1/0)
78352	<i>Graneledone boreopacifica</i>								2 (6/2)		2 (7/3)		
78353	<i>Graneledone</i> sp. cf. <i>boreopacifica</i> (Nesis)										2 (9/6)	2 (7/0)	
78403	<i>Octopus dofleini</i>	giant octopus						1 (22/1)	1 (32/2)	1 (65/2)	1 (26/0)	1 (34/0)	
78452	<i>Benthoctopus</i> sp.							2 (31/4)	2 (64/3)	2 (20/9)	1 (1/0)	1 (8/0)	
78454	<i>Sasakiopus salebrosus</i>	pygmy benthoctopus								1 (106/43)	1 (43/0)	1 (55/0)	
78455	<i>Benthoctopus oregonensis</i>										1 (8/0)	1 (4/2)	
78502	<i>Vampyroteuthis infernalis</i>	vampire squid							1 (1/1)		1 (1/0)		1 (1/0)
79000	Decapodiformes	squid unident.	1 (38/0)	1 (108/0)	1 (8/0)	1 (2/0)	1 (14/0)	1 (80/0)	1 (5/4)	1 (26/4)	1 (3/2)	1 (8/0)	1 (1/0)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
79020	<i>Rossia pacifica</i>	eastern Pacific bobtail	1 (1/0)	1 (3/0)	1 (18/0)	1 (6/0)	1 (9/0)		1 (8/0)	1 (23/0)	1 (41/7)	1 (24/0)	1 (29/0)
79021	<i>Rossia pacifica</i> eggs										1 (2/1)		
79199	Gonatidae unident.										1 (16/0)	1 (8/0)	
79200	<i>Gonatus</i> sp.			1 (34/0)			1 (17/0)		1 (8/0)	1 (1/0)	1 (11/4)	1 (2/0)	1 (6/0)
79201	<i>Gonatus onyx</i>	clawed armhook squid							1(1/1)	2 (5/0)	2 (4/)	2 (1/0)	2 (2/0)
79202	<i>Gonatus berryi</i>	Berry armhook squid									1(6/5)	2 (4/0)	
79203	<i>Gonatus pyros</i>	fiery armhook squid								2 (2/1)	2 (1/0)		
79205	<i>Gonatus madokai</i>							1(1/1)			1 (2/2)		2 (2/0)
79207	<i>Eogonatus tinro</i>											2 (2/0)	
79208	<i>Gonatus middendorffii</i>												2 (1/0)
79210	<i>Berryteuthis magister</i>	magistrate armhook squid		1 (258/0)	1 (294/0)	1 (94/0)	1 (1/0)	1 (50/0)	1 (87/0)	1 (139/7)	1 (132/0)	1 (149/0)	
79250	<i>Gonatopsis</i> sp.												
79252	<i>Gonatopsis borealis</i>	boreopacific armhook squid		1 (4/0)	1 (4/0)				1 (4/0)	1 (43/13)	1 (34/0)	1 (16/0)	

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
79302	<i>Moroteuthis robusta</i>	robust clubhook squid				1 (1/0)					1 (1/1)		
79340	<i>Galiteuthis phyllura</i>								1 (4/2)		1 (3/2)	1 (3/0)	1 (3/0)
79404	<i>Chiroteuthis calyx</i>							1 (2/2)			1 (3/1)	1 (6/0)	1 (1/0)
79406	Cranchiidae								1 (1/1)		1 (1/0)		
80000	Asteroidea	sea star unident.	1 (23/0)	1 (20/0)			1 (25/0)	1 (12/0)	1 (1/1)	1 (5/1)			
80182	<i>Ampheraster marianus</i>							3 (1/0)					
80190	<i>Tarsaster alaskanus</i>						3 (4/1)			3 (2/0)			
80200	<i>Lethasterias nanimensis</i>	blackspined sea star	1 (2/0)								1 (2/0)	1 (1/0)	
80230	<i>Pedicellaster magister</i>	majestic sea star										1 (29/0)	
80250	<i>Stephanasterias albula</i>						1 (1/1)			1 (1/1)	1 (3/0)	1 (1/0)	
80536	<i>Aleutihenricia derjugini</i>	white henricia										3 (2/0)	
80539	<i>Henricia derjugini</i>											3 (1/0)	
80540	<i>Henricia</i> sp.		1 (11/0)	1 (1/0)			1 (4/0)		1 (20/1)	1 (42/0)	1 (76/0)	1 (68/0)	1 (81/1)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
80543	<i>Henricia aspera</i>	ridged blood star											3 (7/0)
80546	<i>Henricia tumida</i>	tumid sea star									3 (1/0)		
80547	<i>Henricia asthenactis</i>										3 (1/0)	3 (4/0)	3 (3/1)
80548	<i>Henricia longispina</i>												3 (1/0)
80549	<i>Henricia spiculifera</i>	spiny henricia											3 (2/0)
80550	<i>Odontohenricia fisheri</i>												1 (2/1)
80551	<i>Odontohenricia</i> sp.												1 (4/0)
80552	<i>Odontohenricia</i> sp. A (Clark)												3 (1/0)
80594	<i>Leptasterias arctica</i>						3 (1/0)						
80595	<i>Leptasterias</i> sp.						1 (3/0)						
80597	<i>Henricia beringiana</i>	Bering henricia											3 (20/1)
80602	<i>Gephyreaster swifti</i>	Swift's sea star								1 (8/0)	1 (1/0)	1 (1/0)	1 (2/0)
80610	<i>Pseudarchaster</i> sp.									1 (1/1)			

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
80620	<i>Pseudarchaster alasensis</i>										1 (24/1)		
80630	<i>Hippasteria</i> sp.								1 (1/0)	1 (2/0)	1 (2/2)	1 (4/0)	1 (2/1)
80632	<i>Hippasteria armata</i>											2 (6/1)	
80635	<i>Hippasteria</i> sp. C (Clark)	Bering spiny star										2 (1/0)	
80640	<i>Hippasteria californica</i>								2 (1/1)		2 (4/0)	2 (3/0)	
80645	<i>Hippasteria heathi</i>											2 (2/0)	
80647	<i>Hippasteria pedicellaris</i>											2 (1/0)	
80650	<i>Hippasteria spinosa</i>	spiny red sea star		2 (1/0)			2 (1/0)		2 (8/0)	2 (14/0)	2 (29/0)	2 (23/0)	2 (10/0)
80660	<i>Pseudarchaster parelii</i>	scarlet sea star							1 (12/1)	1 (29/0)	1 (37/0)	1 (46/0)	1 (42/0)
80670	<i>Cryptopeltaster lepidonotus</i>											1 (1/0)	
80690	<i>Mediaster</i> sp.		3 (4/0)						3 (3/1)	3 (16/1)			
80691	<i>Mediaster tenellus</i>										3 (17/0)	3 (8/1)	
80710	<i>Mediaster aequalis</i>	vermillion sea star							3 (5/1)		3 (1/0)		

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
80728	<i>Ceramaster</i> sp.			1 (1/0)					1 (2/0)	1 (48/1)		1 (136/0)	1 (2/0)
80729	<i>Ceramaster japonicus</i>	red bat star		2 (13/0)			2 (27/0)	2 (5/0)	2 (30/1)	2 (1/0)	2 (148/1)		2 (131/0)
80730	<i>Ceramaster patagonicus</i>	orange bat sea star	2 (12/0)	2 (3/0)			2 (8/0)	2 (4/0)	2 (44/2)	2 (45/2)			2 (8/0)
81060	<i>Solaster</i> sp.		1 (15/0)	1 (21/0)			1 (11/0)		1 (13/0)	1 (14/0)		1 (3/0)	1 (4/0)
81061	<i>Solaster endeca</i>	northern sun sea star						2 (1/1)	2 (8/0)	2 (1/0)	2 (5/0)		
81062	<i>Solaster hypothrissus</i>												2 (2/0)
81063	<i>Solaster</i> sp. B										2 (6/1)		
81067	<i>Solaster</i> sp. A (Clark 1997)								2 (2/0)	2 (5/0)	2 (3/0)	2 (2/0)	
81068	<i>Solaster</i> sp. C (Clark)	beautiful sun star											2 (9/2)
81070	<i>Solaster</i> sp. E (Clark)	Kessler sun star											2 (1/0)
81071	<i>Solaster</i> sp. F (Clark)	Fisher sun star									2 (39/0)	2 (36/0)	
81080	<i>Solaster paxillatus</i>	evening sun sea star						2 (1/0)	2 (16/0)	2 (42/0)			
81090	<i>Crossaster</i> sp.						1 (1/0)	1 (4/0)	1 (3/3)	1 (4/2)	1 (2/1)		

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
81092	<i>Crossaster borealis</i>	grooved sea star					1 (17/0)		1 (66/0)	1 (114/0)	1 (174/1)	1 (157/1)	1 (158/0)
81093	<i>Crossaster</i> sp. A (Clark)	white rose star											2 (5/1)
81094	<i>Crossaster</i> sp. B (Clark)	pink rose star										1 (3/0)	1 (8/0)
81095	<i>Crossaster papposus</i>	rose sea star	1 (1/0)				1 (2/0)		1 (5/0)	1 (1/0)	1 (8/0)	1 (8/0)	1 (2/0)
81100	<i>Heterozonias alternatus</i>	cannonball sun star							1 (5/1)	1 (10/1)	1 (10/2)	1 (6/0)	
81120	<i>Lophaster</i> sp.							1 (1/1)					1 (2/0)
81125	<i>Lophaster vexator</i>	crested star									2 (10/1)	2 (17/0)	
81130	<i>Lophaster furcilliger</i>	crested sea star	2 (2/0)				2 (1/0)		2 (18/4)	2 (37/1)	2 (58/0)	2 (50/0)	2 (38/0)
81310	<i>Pteraster</i> sp.							1 (7/2)	1 (25/2)	1 (33/2)	1 (30/0)	1 (3/0)	
81313	<i>Pteraster</i> sp. A (Clark 1999)											3 (5/1)	
81315	<i>Pteraster tessellatus</i>		3 (1/0)				3 (2/0)		3 (1/0)		3 (6/0)	3 (3/0)	3 (7/0)
81316	<i>Pteraster jordani</i>										3 (5/0)	3 (30/0)	
81320	<i>Pteraster militaris</i>	wrinkled star							3 (4/0)	3 (2/0)	3 (5/0)	3 (16/0)	3 (15/0)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)	
81321	<i>Pteraster marssipus</i>												3 (17/0)	
81355	<i>Pteraster obscurus</i>	obscure sea star			3 (1/0)			3 (2/0)						
81360	<i>Diplopteraster multiplex</i>	pincushion sea star	1 (10/0)	1 (1/0)				1 (2/0)		1 (15/0)	1 (27/0)	1 (44/0)	1 (36/0)	1 (43/0)
81361	<i>Diplopteraster</i> sp.								2 (5/0)			2 (1/1)		
81742	<i>Asterias amurensis</i>	purple-orange sea star	1 (1/0)											
81780	<i>Ctenodiscus crispatus</i>	common mud star	1 (3/0)	1 (1/0)			1 (1/0)		1 (4/0)	1 (13/0)	1 (9/0)	1 (7/0)	1 (6/0)	
81829	<i>Leptychaster anomalous</i>												1 (2/0)	
81830	<i>Leptychaster pacificus</i>												3 (1/0)	
81835	<i>Leptychaster arcticus</i>	North Pacific sea star											3 (2/0)	
81870	<i>Dipsacaster borealis</i>	northern sea star	1 (7/0)				1 (6/0)		1 (12/0)	1 (45/1)	1 (73/1)	1 (66/0)	1 (74/0)	
81910	<i>Cheiraster dawsoni</i>	fragile sea star	1 (1/0)				1 (9/0)			1 (3/0)			1 (4/0)	
81912	<i>Nearchaster variabilis</i>							2 (30/2)	2 (59/1)	2 (23/0)	2 (95/0)	2 (75/0)		
81919	<i>Nearchaster</i> sp.						1 (11/3)			1 (58/0)	1 (1/0)	1 (2/1)		

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
81921	<i>Nearchester pedicellaris</i>								2 (1/0)	2 (7/0)			
82000	<i>Brisingella pusilla</i>								3 (1/0)				
82001	<i>Brisingella exilis</i>								3 (3/1)	3 (7/0)			3 (6/0)
82002	<i>Brisingella</i> sp.							1 (5/0)	1 (1/0)				1 (2/0)
82003	Brisingidae	brisingid sea star									1 (9/0)	1 (8/0)	
82035	<i>Zoroaster evermanni</i>	Evermann's seastar						1 (4/0)	1 (24/0)	1 (35/2)	1 (31/0)	1 (26/0)	
82091	<i>Myxoderma saccatum</i>							3 (23/0)	1 (13/0)	1 (29/1)	1 (30/0)	1 (19/0)	
82500	Echinacea	sea urchin unident.				1 (1/0)	1 (1/0)	1 (2/0)	1 (1/0)				
82510	<i>Strongylocentrotus droebachiensis</i>	green sea urchin	3 (11/0)	3 (2/0)			3 (4/0)			3 (8/0)	3 (28/0)	3 (26/0)	3 (14/0)
82511	<i>Strongylocentrotus</i> sp.								1 (1/0)	1 (9/0)	1 (2/0)	1 (1/0)	
82526	<i>Strongylocentrotus pallidus</i>	white sea urchin				3 (4/0)		3 (1/0)			3 (1/0)	3 (12/0)	
82530	<i>Allocentrotus fragilis</i>	orange-pink sea urchin				1 (1/0)		1 (2/1)	1 (25/0)	1 (25/0)	1 (25/0)	1 (32/0)	
82660	<i>Brisaster</i> sp.						1 (7/1)	1 (2/1)					

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
82675	<i>Brisaster latifrons</i>	heart urchin					1 (1/0)		1 (2/0)	1 (20/0)	1 (27/0)	1 (15/0)	1 (29/0)
82740	<i>Echinarachnius parma</i>	parma sand dollar						1 (1/0)			1 (1/0)		
82750		crinoid unident.							1 (9/1)	1 (7/1)			1 (5/0)
82760	<i>Florometra</i> sp.									1 (3/0)			1 (7/0)
82765	<i>Florometra inexpectata</i>												3 (1/0)
82771	<i>Florometra asperrima</i>	common northern feather star						3 (5/0)				3 (6/0)	
83000	Ophiuroidea	brittlestarfish unident.	1 (4/0)	1 (6/0)			1 (4/0)	1 (1/0)	1 (6/1)	1 (20/2)	1 (14/2)		1 (5/1)
83020	<i>Gorgonocephalus eucnemis</i>	basketstar	1 (5/0)	1 (2/0)			1 (2/0)	1 (4/0)	1 (5/0)	1 (25/0)	1 (27/0)	1 (22/0)	1 (17/0)
83022	<i>Gorgonocephalus</i> sp.												1 (1/0)
83055	Asteronychidae								1 (1/0)				
83060	<i>Asteronyx</i> sp.								1 (20/0)				1 (1/0)
83070	<i>Asteronyx loveni</i>	serpent sea star						1 (3/1)	1 (4/0)	1 (27/0)	1 (21/0)	1 (24/0)	
83080	<i>Astrochele laevis</i>										1 (1/0)		

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
83310	<i>Ophiura</i> sp.								1 (1/0)	1 (2/0)			
83312	<i>Ophiura quadrispina</i>	four spined brittle star											3 (1/0)
83320	<i>Ophiura sarsi</i>	notched brittlestar	1 (5/0)						1 (8/1)	1 (23/0)	1 (13/0)	1 (2/0)	
83340	<i>Stegophiura ponderosa</i>								1 (1/0)	1 (4/0)	1 (1/0)	1 (2/0)	
83341	<i>Ophiacantha normani</i>									1 (8/0)	1 (51/0)		
83342	<i>Ophiacantha</i> sp.									1 (1/0)			
83345	<i>Ophiacantha cataleimmoidea</i>												3 (18/0)
83360	<i>Ophiodolus</i> sp.		1 (1/0)						1 (2/0)		1 (1/0)		
83390	<i>Ophiodolus longispina</i>								3 (2/0)				3 (1/0)
83400	<i>Ophiodolus aculeata</i>	ubiquitous brittle star	1 (6/0)	1 (1/0)			1 (2/0)		1 (8/0)	1 (19/0)	1 (33/0)	1 (22/0)	1 (45/0)
83402	<i>Ophioscolex</i> sp.												1 (4/0)
83412	<i>Ophiolebes pachybactra</i>	thick spined brittle star											3 (1/0)
83701	<i>Amphiodia</i> sp.												3 (1/0)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
85000	Holothuroidea	sea cucumber unident.	1 (8/0)	1 (13/0)			1 (47/0)	1 (13/0)	1 (9/1)	1 (12/4)	1 (3/1)	1 (1/1)	1 (3/0)
85015	<i>Parastichopus</i> sp.			1 (6/0)					1 (20/1)	1 (5/0)	1 (3/1)		
85016	<i>Parastichopus leukothele</i>	giant orange cucumber								1 (39/0)	1 (60/0)		
85060	<i>Pseudostichopus</i> sp.							1 (6/1)			1 (3/0)		
85070	<i>Pseudostichopus mollis</i>	sandy sea cucumber										1 (1/0)	1 (1/0)
85115	<i>Molpadia</i> sp.			1 (1/0)				1 (2/0)	1 (1/0)				
85120	<i>Molpadia intermedia</i>	sweet sea potato						1 (2/0)	1 (5/0)	1 (7/0)	1 (3/0)	1 (2/0)	
85170	<i>Pentamera</i> sp.								3 (1/1)				
85180	<i>Bathyplotes</i> sp.							3 (4/1)	3 (37/1)	3 (35/1)	3 (25/0)	3 (7/0)	
85200	<i>Cucumaria</i> sp.										1 (1/0)		
85201	<i>Cucumaria fallax</i>	sea football							1 (1/0)				
85210	<i>Psolus</i> sp.						1 (2/0)		1 (3/1)	1 (2/0)	1 (1/0)		1 (1/0)
85219	<i>Psolus fabricii</i>	brownscaled sea cucumber									1 (1/0)		

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
85220	<i>Psolus squamatus</i>	whitescaled sea cucumber							1 (5/1)	1 (6/0)	1 (6/0)	1 (9/0)	1 (7/0)
85222	<i>Psolus japonicus</i>									1 (1/0)			
85269	<i>Pannychia</i> sp.								1 (2/0)	1 (5/0)			1 (3/0)
85270	<i>Pannychia moseleyi</i>	deep sea papillate cucumber							1 (7/0)		1 (10/1)	1 (58/0)	1 (76/0)
85287	<i>Synallactes</i> sp. A (Clark 2006)											1 (15/0)	
85289	<i>Synallactes</i> sp.									3 (6/0)	3 (39/0)		
85290	<i>Synallactes challengerii</i>											1 (1/0)	
85310	<i>Paelopatides confundens</i>	swimming sea cucumber										1 (1/0)	
85410	<i>Scotoplanes theeli</i>									1 (1/0)			
85411	<i>Scotoplanes</i> sp.											1 (1/0)	
91000	Porifera	sponge unident.	1 (11/0)	1 (8/0)				1 (12/0)	1 (1/0)	1 (27/2)	1 (56/0)	1 (82/1)	1 (64/0)
91005		vase sponge unident.									3 (10/0)		
91016	<i>Suberites ficus</i>								2 (1/0)			2 (2/0)	

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
91030	<i>Aphrocallistes vastus</i>	clay pipe sponge							2 (27/0)	2 (59/0)	2 (65/1)	2 (71/0)	2 (64/0)
91036	<i>Heterochone tenerum</i>	crusty tube sponge										3 (6/0)	
91038	<i>Phakellia</i> sp.											3 (1/0)	
91039	<i>Mycale</i> sp.										3 (1/0)	3 (3/0)	
91040	<i>Mycale loveni</i>	tree sponge							1 (6/0)	1 (8/0)	1 (5/0)	1 (8/0)	
91049	<i>Halichondria</i> sp.											3 (1/0)	
91050	<i>Halichondria panicea</i>	barrel sponge						3 (2/0)	3 (1/0)	3 (1/0)	3 (2/0)	3 (2/0)	
91053	<i>Rhabdocalyptus</i> sp.	cloud sponge						3 (15/0)	3 (9/0)	3 (16/1)	3 (29/0)		
91056	<i>Phakellia cibrosa</i>	funnel sponge										3 (1/0)	
91063	<i>Phakellia beringensis</i>	hat sponge									3 (1/0)	3 (1/0)	
91064	<i>Plicatellopsis amphispicula</i>	firm finger sponge									3 (3/0)		
91068	<i>Leucosolenia blanca</i>	yellow leafy sponge						3 (4/1)			3 (1/0)	3 (3/0)	
91069	<i>Tethya</i> sp.	ball sponge						3 (1/0)					

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
91074	<i>Polymastia</i> sp.											3 (1/0)	3 (5/0)
91080	<i>Halichondria cf. sitiens</i>	yellow green papillate sponge									3 (1/0)	3 (4/0)	
91081		Yellow papillate sponge											3 (2/0)
91088	<i>Neoesperiopsis rigida</i>	soft finger sponge										3 (1/0)	
91089	<i>Neoesperiopsis infundibula</i>	rough China hat sponge							3 (1/0)	3 (1/0)	3 (4/0)	3 (3/0)	3 (7/0)
91093	<i>Neoesperiopsis digitata</i>												3 (1/0)
91105	<i>Stelletta</i> sp.	stone sponge									3 (1/0)		
91111	<i>Polymastia robusta</i>	long nippled sponge											3 (1/0)
91112	<i>Weberella bursa</i>	pale mammilated sponge											3 (2/0)
91226	<i>Latrunculia</i> sp. A (Clark 2006)	green papillate sponge										3 (1/0)	
91227	<i>Latrunculia</i> sp. B (Clark 2006)	smooth green sponge										3 (1/0)	
91700	Hexactinellida	glass sponge unident.		3 (2/0)			3 (5/0)		3 (1/0)		3 (1/0)		3 (15/0)
91701	<i>Staurocalyptus</i> sp.												3 (6/0)

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
91710	<i>Aulosaccus schulzei</i>	vase sponge									3 (1/0)	3 (7/0)	
92000	<i>Platyhelminthes</i>	flatworm unident.									3 (3/0)		
92502	<i>Emplectonema</i> sp.											3 (3/0)	
92802	<i>Cerebratulus californienesis</i>												3 (2/0)
94000	Sipuncula	peanut worm unident.		3 (1/0)					3 (3/1)	3 (5/1)	3 (7/0)		3 (2/0)
94011	Phascolosomatidae												3 (2/0)
94500	Echiura	echiuroid worm unident.		3 (2/0)							3 (1/0)	3 (1/0)	
95000	Bryozoa	bryozoan unident.									3 (1/1)		
95030	<i>Flustra serrulata</i>	leafy bryozoan									1 (1/0)		
95036	<i>Alcyonidium pedunculatum</i>												1 (3/0)
95070	<i>Rhamphostomella costata</i>	ribbed bryozoan									1 (1/0)	1 (1/0)	
97000	Brachiopoda	lampshell unident.	1 (2/0)				1 (3/0)			1 (1/0)			
97110	<i>Terebratalia transversa</i>	common brachiopod								1 (1/0)	1 (3/0)		

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
97111	<i>Frieleia halli</i>												1 (1/0)
97115	<i>Terebratulina unguicula</i>	snakeshead brachiopod											1 (3/0)
97116	<i>Laqueus californianus</i>	California lamp shell							1 (3/0)	1 (6/0)	1 (6/0)	1 (9/0)	
97117	<i>Laqueus vancouverensis</i>	Vancouver lampshell											1 (10/0)
98000	Asciidiacea	tunicate unident.	1 (1/0)				1 (1/0)		1 (1/0)	1 (3/0)	1 (6/0)	1 (3/0)	1 (2/0)
98070	Thaliacea	salp unident.						1 (7/0)	1 (11/0)	1 (5/0)	1 (32/0)		
98082	<i>Styela rustica</i>	sea potato						1 (1/0)					
98100	<i>Boltenia</i> sp.												1 (2/0)
98205	<i>Halocynthia aurantium</i>	sea peach							1 (1/0)				
98300		compound ascidian unident.							1 (5/0)	1 (2/0)			
99904	<i>Molgula retortiformis</i>	sea clod					2 (1/0)						
99981	<i>Craniella cranium</i>	baseball sponge											3 (2/0)
99990		invertebrate unident.		1 (4/0)					1 (2/1)				

Table 2. -- Cont.

Species Code	Taxon	Common Name	1976 (54)	1979 (168)	1982 (328)	1985 (337)	1988 (134)	1991 (89)	2000 (115)	2002 (154)	2004 (238)	2008 (207)	2010 (209)
99993		empty bivalve shells								1 (13/0)	1 (8/0)	1 (12/0)	1 (3/0)
99994		empty gastropod shells					1 (1/0)	1 (1/0)	1 (9/0)	1 (51/0)	1 (41/0)	1 (44/0)	1 (14/0)
99997		unsorted catch and debris										1 (7/0)	
99998	Polychaete tubes									1 (5/0)	1 (4/1)	1 (8/0)	1 (3/0)
99999		unsorted shab					1 (3/0)						